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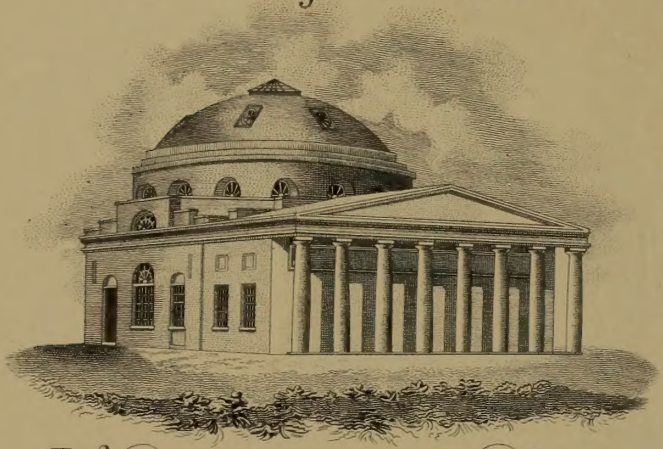

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physical Therapy Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine or of Physical Therapy during the years 1813-1937. The individual dissertations were bound sometime during the 1940's. The original tables of contents for the bound volumes contained incorrect or misspelled authors' surnames, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: [illegible], Historical Library Preservation Officer; Maria Mangan Pallas, Metadata Librarian; Assistant Librarian; Angela Cochrane and Carol Harling Hilary, Reference Division; [illegible] Schoar and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available online via the Digital Archive (archive.hdl.umaryland.edu) and the Internet Archive (archive.org).

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1849 (d)

Author	Title	Bound out of Order
Cronmiller, Thomas Le Page	Pathology and Treatment of Cholera Infantum	
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Carter, George W.	Moral Practice	p. 25, 27, 28, 26, 1-24
Boarman, Charles	Angina Pectoris	p. 1-17[1]
Dorsey, William P.	Examination of Some of the Theories Proposed to Explain the Sources of Malaria	p. 5-22, Title page, p. 1-4[2]
Magruder, D. Lynn	Pleuritis	p.1[3]
Read, John L.	Typhus Fever	p. 1-10[4]
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Lester, Shipley, Jr.	De Cerebro, Medulla Oblongata et Spinale	p. 84-93, Title page, p. 1-83[6]
Thomas, George S. C.	Remittent Fever	p. 1-18[7]

[1] Followed by pages 5-22 on the topic of Malaria.

[2] Pages 5-22 of the dissertation on Malaria are at the end of the thesis on Angina Pectoris. Page 4 is followed by pages bound out of order, beginning with p. 37, on the topic of Pleuritis, and pages 11-20 of the dissertation on Typhus Fever.

[3] Other pages of the dissertation on Pleuritis are bound of order following p. 4 of the dissertation on Malaria.

[4] Pages 11-20 of this dissertation are bound at the end of the dissertation on Malaria.

[5] Followed by pages 84-93 of the following thesis De Cerebro...

[6] Pages 84-93 are bound at the end of the preceding thesis on Pneumonia...

[7] No title page. There are two candidates for graduation in 1949 who wrote on this topic. The title page for this particular dissertation seems to be the one bound two blank pages before the title page for "Pericarditis".

HSHSL 2011 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Bound out of Order
Norris, Basil	Inflammation	p. 1-43[8]
Leach, Richard V.	Pericarditis	p. 11-19[9]
Thomas, George S. C.	Remittent Fever	Title page only[10]
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Hardy, Thomas E.	Scarlatina	
Larkin, William D. F.	Nature and Treatment of Paralysis	
Thomas, Edwin S.	A History of Four Cases	

[8] After two blank pages, are found pages 11-19 of the thesis on "Pericarditis". The title page only for the dissertation on Remittent Fever by George S. C. Thomas is inserted after a blank page.
[9] Pages 1-10 found later in this volume.
[10] Pages 1-18 are found earlier in this volume.
[11] Incomplete. After page 10 of this thesis are bound, out of order, pages 24-32 followed by 12-23 of a dissertation on Remittent Fever, presumably the one submitted by Oscar A. Fergusson.
[12] Other pages of this dissertation are found, bound out of order, after p. 10 of the previous thesis on Pericarditis.

HSHSL 2011 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1849 (d)

Cronmiller, Thomas Le Page	Pathology and Treatment of Cholera Infantum	24p.
Price, Edward B.	Gun Shot Wounds	20p.
Carter, George W.	Moral Practice	28p. (1)
Boarman, Charles	Angina Pectoris	17p. (2)
Dorsey, ~~Wm.~~ William P.	Examination of Some of the Theories Proposed to Explain the Sources of Malaria	22p. (3)
Magruder, D. Lynn	Pleuritis	38p. (4)
Read, ~~I.~~ John L.	Typhus Fever	20p. (5)
Steele, Thomas R.	Pneumonia and Bronchitis	21p.
Lester, Shipley	De Cerebro, Medulla Oblongata et Spinale	93p.
Thomas, George ~~T.~~ S. C.	Remittent Fever	18p.
Norris, Basil	Inflammation	44p.
Thomas, George S.C.	Remittent Fever (title page only)	
Leach, Richard V.	Pericarditis	19p.
Fergusson, Oscar A.	Remittent Fever	31p.
Hardy, T. Thomas E.	Scarlatina	22p.
Larkin, William D. F.	Nature and Treatment of Paralysis	25p.
Thomas, Edwin S.	A History of Four Cases	26p.

1) Bound out of order. Pages 25, 27, 28 and 26 (in this order) are directly after the title page, followed by pages 1-24. 33

2) Binding error: 17 pages of Boarman's "Angina Pectoris", followed by pages 5-22 of the next thesis by William P. Dorsey. (3) Bound out of order, 34 missing.

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P138

An
Inaugural Dissertation
on
The Pathology and Treatment
of
Cholera Infantum.

Submitted to the examination
of the
Provost, Regents, and Faculty of Physic
of
The University of Maryland,
For the Degree
of
Doctor in Medicine,
By
Thomas Le Page Cronmiller
of
Maryland.

A.D. 1845.

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An analysis of the symptoms of Cholera Infantum presents us with two clear and well marked pathological states, or physiological derangements. These states of the system are well pointed out by the symptoms attendant in each state, by the effects produced by remediate agents in the organs implicated; as well as by the order in which the morbid events succeed each other when left to nature, and the evidence furnished by morbid anatomy.

The two pathological conditions which present themselves in this complaint are First. Bicoral congestion. Secondly. Local Inflammation.

1st. Bicoral congestion. This state is generally attended with fever, though some cases occur in which the reaction is imperfect, and slightly developed. It begins with vomiting, or both vomiting and purging. A bilious diarrhea is the most prominent symptom of this congestion. This diarrhea will sometimes continue for several days

without any other symptom forcing itself upon the notice. But this is rare. The diarrhœa is commonly attended with a violent vomiting of bilious fluids, white or yellowish tongue, great thirst, impaired appetite, and dry skin. A child in vigorous health is, in some instances, suddenly seized with vomiting and purging, without any apparent previous indisposition or complaint. The discharges by vomiting consist at first of coagulated milk, mucous or slime, afterwards these mixed with bilious matter, and having a greenish or greenish yellow appearance.

When vomiting ushers in the complaint, as it often does, the discharges are bilious, and extremely offensive, with a sour or putrid odour, consisting at first of a light colour or yellow and greenish fluid mixed with slime or mucous. The slime and mucous increasing in quantity. The natural faces are generally retained, though small lumps are occasionally passed. Worms are discharged in some cases.

The child appears to suffer considerable pain, he is quite restless, drawing his knees to his abdomen, tossing his head backwards and forwards. Cold fluids are eagerly desired to quench the intense thirst.
The pulse is small, quick, and feeble. A strong determination to the head, as evinced by the increased temperature of the part, and tendency to stupor, is sympathetically excited. But this is not so strong as in the second stage where the intestinal irritation is excessive. The fever is of the remitting type, as it is attended with evident exacerbations, especially during the evenings, which exacerbations are sometimes attended with delirium during the night. There is a manifest tendency to a return of healthful excitement after every exacerbation. The symptoms at this period show a most favourable point in the disease. The vomiting subsides. The purging becomes less frequent, and often assumes a bilious character. The skin is

moist and less hot to the feel, pulse not so quick. thirst less urgent, and the tongue becomes more moist.

The system now appears to pause between health on the one hand, and inflammation on the other. If an equilibrium of action in the skin, kidneys, liver, and mucous membranes be kept up for a time, the congestions will be removed and health restored; but if one or more of the great organs of secretion still continues torpid: or if some of these secreting surfaces, as the skin &c. be prevented from doing their duty by an excessive secretion from the liver, or a constant draining from the bowels, beyond what may have been sufficient to remove congestions, the equilibrium of action so far from being restored will be still farther broken, and inflammation in either case ensued.

This brings us to the consideration of the second pathological state of the system, Local Inflammation. The symptoms marking this state of the disease are, abdomen tense

and sore to the touch, flatulency, restlessness, wakefulness, screaming, dry skin, dry red tongue, great thirst, griping pains attending the evacuations as evinced by the crying of the child, the evacuations occasionally streaked with blood. If the fever runs high, the eyes have a fierce, wild look, and some delirium is present. If the fever be slight, they loose their lustre, and become sunken and hollow, being but half closed during sleep, showing a dull looking cornea beneath. A cough generally attends this stage. The stools are more frequent in this stage than in the former, being frequently from fifteen to twenty in the twenty four hours. They vary in colour from a bloody mucous, to a black pitchy looking substance. The latter indicating great danger. The chymefactive process is almost entirely suspended; the most bland and nutritious substances affording no nourishment, but turning sour, keep up and increase the diarrhoea. The least jar or irregular motion, gives pain, and sometimes excites spasms or convulsions in

which the child frequently dies. The inflammation attending this state, and which may be either acute, subacute or chronic, determines its duration. The acute, if it prove fatal, does so in a very short time; in some of the more violent cases death taking place in twenty four hours. If it runs into either of the other forms of inflammation, there is an apparent remission of some of the more violent symptoms as pain, griping &c which are less severe in degree.

The temperature of the extremities is below that of the natural state, and they appear shrunken. In this state the child will live several weeks, the complaint putting on the form of, or running into chronic diarrhoea, with temporary exacerbations and remissions, occasioning remarkable emaciation, flatulent disturbance of the abdomen, aphthae on tongue lips &c, swollen gums, and sordes. A disturbed comatose sleep is present, there is moaning and occasionally prolapsus ani, singultus, and livid spots on the skin.

The strong tendency to cephalic affection

manifestation in this disease is evidently dependant on the primary abdominal disorder. All irritation in the alimentary canal exerting a powerful influence on the functions of the brain.

Prognosis= This will depend upon the effects of the remedies we employ; but more particularly upon the state of the evacuations. We may expect a favourable termination of the case if these become more abundant, of a darker colour, more bilious, and with these changes, if the gastric irritability, cerebral symptoms, and fever subside. On the contrary, an increase of the irritability of the stomach, with spasms or convulsions, increased restlessness, cerebral symptoms remaining, rapid emaciation, small thready pulse, cold and damp surface, pink coloured discharges, flatulent distention of the abdomen, aphtha, stupor, hippocratic countenance are unfavourable symptoms. We may not with any confidence expect a happy issue, untill healthy bile appears in the stools, and the evacuations assume a healthy character.

There are but two diseases with which Cholera Infantum can possibly be confounded; these are Dysentery and Diarrhœa. Attention to the symptoms and circumstances of the case, will readily enable us to distinguish the one from the other.

Dissection and Nature of the Complaint. Where death occurs early in the attack, scarcely any mark of disease can be found except an unnatural paleness of the mucous membrane of the stomach and intestines, with hepatic congestion and enlargement. The gall bladder is distended with dark green bile, or a pale and nearly colourless fluid. The brain presents no morbid appearances beyond slight congestion. In the protracted cases the digestive mucous membrane presents from patches of redness in various parts to thickening, softening, or submucous infiltration, though rarely ulceration or excoriation, except in the mucous follicles of the small intestines, which are frequently enlarged and ulcerated; there is enlargement of the

mesenteric glands. The liver is larger than natural, in some cases of a darker, in others of a lighter colour than in health; the gall bladder is filled. Where the intestinal inflammation has been excessive, the bowels have been found adherent through the medium of lymph, exuded on their peritoneal surfaces. Professor Cooper has pointed out follicular inflammation of the intestinal canal as the characteristic patho-
= logical cause of Cholera infantum. But Drs Dewees, Page, Quinsley, Jackson, Sd. Stewart, Coxe & others have directed attention particular-
= ly to the enlargement of the liver as connected with the pathology of this disease. Doct Sd. Stewart dwells emphatically upon this enlargement as an important morbid feature in this complaint. He observes that "it is a very stri-
= king coincidence, that M. Billard has shown that the follicular apparatus of the intestines is in a state of active development simultaneously with the appearance of the teeth; and that every part of the digestive system undergoes at this

period a change in its functional action. In connection with this state of the part, the congested state of the liver, produced by the heat of the weather, particularly when aided by an impure state of the air, becomes the principle source of the disease by preventing the return of the blood from the intestines through its ordinary channel.

The mucous follicles already predisposed to disease by their natural development above mentioned, are excited to morbid action by being thus crowded with an undue amount of fluids.

The symptoms and post mortem appearances show that the disease consists of inflammatory irritation, rapidly passing into inflammation of a greater part of the mucous lining of the digestive tube, preceded by, and accompanied with congestion of the liver. Often attended by depression of the vital energies, and a morbid state of the secretions, which occasion sympathetic disorder of the functions of the brain, or of its substance or membranes.

Such is the picture presented by this destructive disease of infantile life, when it runs

its course without check. It is, however greatly modified by local circumstances; by age, constitution, teething, atmospheric temperature. But every case is made up of either one or both of these pathological states. It is important to the success of the treatment that the existing pathological state, and real condition of the system be made out before any remedial plan be adopted.

Treatment.

Cholera Infantum is frequently treated as a common diarrhœa; a purgative or two followed by astringents being the common practice. The consequence of this is hydrocephalus, Tabes mesenterica, or in some cases immediate death.

First state or hepatic congestion. The diarrhœa may be easily checked, but unless the hepatic congestion be removed, unpleasant sequelæ will always remain.

The great difficulty is to allay gastric irritability there being but little danger in those cases unattended with it. Our first remedies, therefore, should be directed against this gastric affection if it

should be present. It may be arrested by the administration of chalk julep, mint water to which is added a few drops of Paregoric, lime water and milk, sup. carb. soda in mint water, or a cataplasm of mint leaves to the region of the stomach. Cinnamon tea combined with small doses of calomel, or rubefacients to the abdomen. Any of these means will be sufficient to quiet the stomach and enable it to retain a small dose of sub. carb. soda and Rhei as a purgative to procure three or four stools, or, as was recommended by the late Prof. Baker, one grain of Calomel for die untill the stools became more natural, which will be observed after the third or fourth dose, following this by ℞ gr Calomel with three or four grains of chalk bis die. The disposition of the calomel to remove the portal congestion, excite the biliary secretion, equalize the circulation, and determine to the surface, should be assisted by rubefacients, stimulating liniments, the warm bath with friction. These means will resolve the congestions, restore the equilibrium of the circulation,

and bring on a healthy state of the secreting fluids.

The warm bath is an indispensible remedial measure in preventing the formation of congestions as well as removing them after they have formed, by the powerful determination to the surface which it excites. This measure alone has kept off an attack of the cholera, by being used daily and dressing the patient in flannel. These measures may be aided by injections of chalk with a few drops of Tinct. Opii if there be much tenesmus and griping. They will be of much service in procuring quiet, and in allaying intestinal irritability.

To remove congestions and prevent their subsequent formation by keeping up a gentle and equable secretory action in the skin, kidneys, mucous membranes, and liver, and to prevent an excessive discharge from taking place from any organ, which will always be at the expense of the other organs are the indications to be kept in view in the treatment of this stage of Cholera infantum. If there be frequent discharges from the bowels of a child in its second summer. 1/4 to 1/2 grain

of Calomel with a small quantity of Chalk, or, if there be much intestinal irritability, a small quantity of Opium, once or twice a day, will arrest it in a day or two.

This brings us to the second condition or the inflammatory stage. If the preceding stage has been treated in time, this, the second, will never follow. It is characterized by being attended by a greater degree of pain and restlessness, by swelling, tenderness, and heat of the abdomen. The head is also particularly affected in this stage. When inflammation has once set up in an organ it cannot be removed at once like conge= =stion or engorgement, ~~be removed at on~~ but will run its course though its violence may be moderated. The physician has in this stage to moderate the excessive arterial reaction, rouse the torpid organs as the skin, liver &c. and to restrain the exhausting discharges which take place from the alimentary canal. The inflammation is to be judiciously guarded and restrained that it may run its course without producing any structural lesion.

We can apprehend the necessity of abating the excitement of the arterial system, of guarding against exhausting discharges which will keep up the inflammatory action of the part suffering, and, if we can, an equable action of the secretory vessels of all the organs of the body. The latter cannot be effected while the heat of the surface is kept up and increased by fever, or when the vessels have become torpid from the too continuous application of cold. Nor can it be brought about if one organ be permitted to secrete more than its natural quantity of fluids, as it would prevent a ballance of action from taking place, and keep up the diseased state by preventing an equilibrium in the system.

In the cases in which the fever is early developed, and much pain of the head or abdomen is complained of, their dependency upon inflammation of the mucous lining of the digestive tube should not be forgotten, nor the cephalic affection being a secondary one, overlooked.

Blood letting is often necessary to quiet the

arterial commotion. Leeches are well calculated to subdue inflammatory excitement with the least loss of blood; and are more useful in this disease than general bloodletting. They may be applied to the epigastric region or behind the ears. When applied to the former region a succession of warm poultices should follow them. A full dose of Calomel should be exhibited followed soon after by an injection of Castor oil or Olive oil in any demulcent vehicle.

The warm bath should be used once or twice a day, and it may be rendered more efficient by adding salt or mustard or both to it. After the patient has been removed from the bath and dressed, stimulating embrocations to the surface have an excellent effect. The turpentine epithem to the abdomen or extremities has been advised. When these measures do not have the effect for which they were prescribed, the application of blisters for three or four hours, and their re application for an equally short period to another part, may be had recourse to. After the inflammation has

been lowered by these means, Calomel in half grain doses combined with Opium if griping be present, will relieve in the worst cases. The tenesmus and griping may be relieved also by injections of starch and laudanum. During the high arterial excitement in this stage purgatives will fail to procure bilious stools, we have therefore to abate the violence of the fever before we can affect the secretions of the liver. If the griping and tenesmus remain after the febrile symptoms have been removed, the injection of starch and laudanum will relieve them. Rhodgnus given in enema have more effect in abating the sufferings of the patient than when administered by the stomach. When the discharges are very offensive, the disease having run into a dysenteric state, small doses of Chlorate of Potash or lime in aromatic water, mucilaginous draughts, or injections, will be serviceable. When it has lapsed into the form of diarrhea, from chronic inflammation of the intestinal surface Hydras c Creta i gr. Magnesia Calcin. ij gr. Liquor Opii Cix m with sugar and gum Arabic may be given three

times a day in the following draught, carb Soda iv grs. Gum Arabic ℈ xii grs. Cinnamon water ℥vi. Syrup of poppies ℥ss.

In the Chronic stage when the stools have become watery and exhausting no medicine will always cure it; no plan of treatment can quell every case, and none can at once arrest it. The most skilful physician has to watch attentively and patiently: and to adapt his remedies to the circumstances of each case, varying them as the circumstances vary. To check the discharges Spts Turpentine in 20 or 30 drops are recommended. But it would be better even at this advanced stage to give a full dose of Calomel, and if there be fever, Dovers powder in grain doses at bed time; the Turpentine being given through the day in any convenient vehicle. During this period also Rhubarb, Magnesia, and Ginger; Lime water and milk; Catechu with Chalk; Hydrag C. Creta with Dovers powder; Columbo with Soda; or small doses of the Sulphates of Iron and Potash may be severally given according to circumstances, to lessen the frequency of the stool.

If pain be still complained of Dover's powder, Comp. tinct, opii, or syrup of poppies are necessary.
Doct Copland speaks favourably of Bi-borate of soda or bitartrate of potash either alone or mixed in this stage. The daily use of stimulating liniments to the abdomen while it remains tense and painful, and a broad flannel band around the belly must not be neglected. These means will be found to check the stools, remove inflammation, and bring about a happy issue. The febrile nature of the disease must not be overlooked, - the patient may be allowed in its early stage cooling febrifuge drinks, as the acetated liquor of ammonia with Nitre, Nit: spts ether p. at short intervals.
Sulph. Quinine in small doses in Conserve of roses or syrup may be given when the irritability of the stomach has subsided. Infusion of Bark with a few drops of liquor potassa has also proved serviceable. If the inflammation have but recently set up and is of the subacute kind, small doses of Calomel and chalk, and opium to suit the circumstances of the case, and external derivatives

are the only measures necessary in the majority of cases in the country. When it occurs in large cities a greater degree of debility attends it, and it may be necessary to strengthen the powers of the system by cold infusion of Columbo, or Sulphate of Quinine in solution. The administration of Opium in this complaint demands caution from the marked tendency to cephalic affection, and from the especial manner in which Opium determines to the head in childhood. In the chronic stages its use is strongly indicated. As this disease occurs to infants mostly under the twelfth month of their age, the diet best suiting their condition is the mother's milk. If the infant has been weaned a healthy wet-nurse should be procured, but as this is not possible in many cases, small quantities of Cow's milk diluted, thin barley water, or rice water may be substituted. The usual farinaceous articles may be allowed in the latter stages. Exercise in the open air, or removal to the cool air of the country is of the greatest service in all stages and conditions of this complaint. The hydrophobic measures may

be summarily stated, wearing flannel next the skin, keeping the lower extremities warm, cold ablutions two or three times a week, attention to diet, avoiding unripe or stale fruits, and attention to the gums during dentition.

History and Causes.

Cholera Infantum is prevalent from May to September, and attacks those who are between four months and two years old, seldom appearing before or after these periods. From the irritable state of the child's system during dentition, it is more generally confined to that period when it occurs between the months above named. The second summer, that in which teething comes on, is the one most dangerous to infantile life, and if they safely pass through that, the chances of their surviving the period of infancy are in their favour. It is most prevalent in the close, ill ventilated streets of large cities, and in low and dirty villages. As it occurs at one particular season only it is independant of dentition, although

this circumstance, as well as the use of unripe fruit will doubtless contribute to its security.
From the periods of its appearance and disappearance varying with the temperature, heat evidently has much to do in its causation. It is stated that children born of white parents in the more unhealthy countries within the tropics, very generally die of the cholaric form of fever at an early age, unless removed to a colder climate. Its prevalence here has been known to be checked by a fall in the temperature of even a few degrees, but it would again break out on the temperature's rising.
Its cause is doubtless the action of high ranges of atmospheric temperature on malarious localities, as dirty and closely inhabited towns, low country situations &c. &c. assisted by errors in diet, clothing, and premature weaning, also a deficiency of mother's milk. That it originates chiefly in a mephitic and impure atmosphere is shown by its occurring among children so situated, by its being confined in temperate climates

to the seasons in which the ranges of temperature are the highest, its greater prevalence in the local=ities which furnish materials for such exhalation, by its appearance at about the same time with Remittent and intermittent fevers, and by its accompanying fever putting on generally a remittent type.

After the child has passed the third year the causes which produce it will occasion, according to their intensity, combination, and the states of the predisposition of the patient, either inflammation of some of the abdominal viscera or fever of some kind. The causes of Cholera Infantum may be summed up as follows, the action of high ranges of temperature on miasmatic localities or districts, giving origin to miasma which produce their effects on those systems only which are too debilitated to withstand their attacks. This debility of the system has numerous causes, the principle of which are heat, the irritation of teething, indigestible and irritating articles of food, and inattention to clothing and cleanliness. The effects of

the action of these miasmata on the adult are Bilious fevers, and on the infant Cholera Infantum.

An
Inaugural Dissertation
On
"Gun Shot Wounds,"
Submitted to the Examination
Of the
Provost, Regents and Faculty
Of Physic,
Of the University of Maryland,
For the Degree of
Doctor of Medicine,
By
Edward B. Price.

February, 15th 1849.

One would think from the great variety of diseases, injuries, and accidents, that "human flesh is heir to," there would be no difficulty in selecting one, on which to write a "Thesis." Not so! Owing to the numerous and great array of subjects; all possessing equal claims to the distinguished honor, the choice is quite a perplexing one.

The boy on seeing a beautiful field of seed, was enraptured with the prospect, and immediately decided on selecting one that was more perfect & more handsome than its numerous fellows. He entered the field, and traveled it over and over again, and found his fancy not so easily satisfied;— all appeared to command equal admiration, till finally he retraced his steps, and selected the one at the spot, where he first entered the field. So with myself, I have looked over the

vast domain of science, that has been made to "bloom and blossom" by so many eminent cultivators, that I am equally lost and perplexed to decide in what part of the great field to make my selection. — Like the boy, I shall go back to the spot that first attracted my notice, and offer a few observations, noticed in Mexico, whilst attached to the Medical staff of the Army. I can promise nothing original, but shall indeed deem myself fortunate, if I can say well, that which has been said long ago. Ars est celare artem.

During the last and present centuries, a series of wars have desolated the fairest regions of the European world, and drenched their finest fields in blood; — whilst even our happy land, has not been without the scourge. The medical philanthropist will naturally ask: — "What results have accrued from such ample sources of experience? —

What progress has been made in softening the miseries of pain and disease, and extracting from such multitudes of victims, antidotes to the waste of human life?" These questions, fortunately for the triumph of science, can be satisfactorily answered by reference to the great labors of Larrey, Guthrie, Heaven; together with many bright names in our own country.

The "Observations" to which reference has been made, are on gun-shot wounds, concerning which, I beg to offer my present remarks.

A Gun shot wound may be defined as a violent contusion, with or without a solution of continuity, effected by a solid body, rapidly projected by the explosive force of gun-powder.—

On the reception of a wound from a musket or pistol ball, through the parietes of the thorax or abdomen, or of an ordinary fleshy part, the amount of hemorrhage and pain (where there are no important blood vessels or nerves implicated) depends upon the velocity of the

ball at the moment of contact. If it be from a great distance revolving slowly on its own axis, the wound will partake of the characters of lacera=tion and contusion, causing great pain and little hemorhage. If however, received from close quarters, the wound will then be more of the punctured kind, giving rise to less pain and more hemorhage. Some authors positively assert, that there is no pain or hem=orhage, unless a large artery or nerve be wound=ed. Whilst Mr. Guthrie as positively asserts that great pain and considerable hemor=hage are always present. The two modifying circumstances, just mentioned, it appears to me, will fully explain this discrepancy of opinion. The wound of a large artery may be known, if blood be continued to be poured out in great quantity, and per saltum, in spite of pressure.

The constitutional symptoms accom=panying these wounds, cannot be expected

as constant and unvarying. They are as wide=ly different, almost as the number of subjects affected. One man with the slightest injury will present many alarming symptoms:— such as the most intense vomiting, tremor, palpitations, terrifying freight, harrowing im=pressions, cold sweats, relaxed condition of the muscular and nervous systems, involuntary dis=charge of faeces and urine, resembling to all ap=pearance a subject in articulo mortis. I have not the least doubt, many a poor fellow suc=combs on the battle field, from a scratch, that at any other time he would not notice. It is incredible to see the instant relief afforded by a soothing assurance of safety from the Surgeon, accompanied by a mouth full of spir=its. The poor fellow, down springs to his feet, and almost suffocates one with thanks. On the other hand, men of determined forti=tude will endure the most shocking mu=tilation, without a murmur—not a symp=

tion being present, save that of pain. Among the numerous group, the latter, in my humble opinion, is the only constant one. At the Battle of Buena Vista, I saw a private of the (I think) Kentucky regiment, who had both arms carried away just above the middle shaft of the humerus, and otherwise injured across the chest, sitting upon the ground, perfectly calm without an annoying symptom, other than pain. In an other part of the field, I saw a German with all the distressing symptoms, before mentioned; — to all appearance in a state of collapse, "laid out" (as he said) "to die". And doubtless would, if he had not been relieved by a warm stimulant and assurances of his safety; — all this occurring from the loss of the first phalanx of one of the fingers!!

Perhaps it may be doubted, that death could take place from so slight a cause, especially, when the recovery is so rapid as I have mentioned. Dr Hennen

speaks of these "tremors" as of little importance, and generally magnified by the inexperienced. To this it may be replied, that death does occur from freight; instances of which are by no means uncommon. The records of the Asiatic Cholera, might be adduced; as it first appeared in the United States, in proof of this position. I have more than once witnessed among soldiers, these pulseless terrifying tremors, and have no difficulty in believing that the timid, moved and do die, in this condition on the Battle field, and account for it, a priori, by referring the remote cause to constitutional timidity, and the exciting to the nervous shock.

There are many instances on record of the curious and migratory course of balls. Assistant Surgeon Roberts informed me that he had a soldier under his care, who had received a musket ball (in the act of lending) on the anterior extremity of the

Os Femoris, to the right of the ligamentum patellæ, which was thrown up into the axilla. A knowledge of the strange direction balls are liable to take, is of great importance in prognosis and treatment. For instance, a patient may come to you with a slight flesh wound, to all appearance of little consequence, when in another part of the body, there may be the most serious lesions, all caused by the same missile. A continued exploration, at the point of entrance, is more than useless, as it frequently happens, that the foreign body has traversed the limb in some unlooked for direction. It would be equally improper to abandon a case, when there was but one orifice, without a proper examination, on the supposition, that the ball had rebounded, or passed to a distant part, for in many instances, it will be found very close to the point of entrance having made the entire circuit of the body or limb.

Soldiers are frequently found dead on the field of battle, free from a bruise or mark that can be detected. This appearance has given rise to a multiplicity of theories. The one offered by Baron Larrey, appears to be received as the true one. It is in substance as follows — "A cannon ball, after passing a certain distance loses its rectilinear movement and revolves upon its own axis; if it comes in contact with the body when thus moving it turns round the part in the same way, as when passes over a limb. The elastic parts yield, but those offering a greater resistance, are either bruised or ruptured." This appears very well, but not, I think without objections, for it distinctly asserts that such contact always causes laceration, rupture or contusion; but utterly fails to account for death in those cases where there is no appreciable lesion, externally or internally; for it is now well understood, that dissection frequently fails

to detect the slightest morbid appearance. It does appear that actual contact is not the only cause of death. We are therefore, forced to admit the influence of the shock, whether it be electrical or not.

In the treatment of gun shot wounds, the first duty of the Surgeon is to cleanse the parts well, and explore the wound, for which purpose the finger has the decided preference; and carefully search for foreign bodies and remove them, if possible. The attempt, however, should never be made from any confused notions, or by a desire to satisfy the whimsical expectations of bystanders or patients but on the clearest prospect of success — for nothing impairs the confidence of friends, or exercises a more pernicious influence on the mind of the patient than an abortive effort on the part of the Surgeon, to extract the offending body. If it present superficially, of course we have

no difficulty in cutting for its removal at once. But if it be deep seated and does not impinge on any important blood vessel or nerve, it is better to let it alone. Otherwise the irritation caused by an officious probing or digging at the wound, is apt to be followed by inflammation, more serious than the presence of the extraneous matter.

If the lace has passed entirely through a fleshy part, little need be done other than to sponge the part clean, and apply a pledget of lint dipped in cold water or ice, to both orifices of the wound. Most writers recommend cross pieces of adhesive strips to confine the lint. It would appear more important, that the strips should be applied to the track of the lace, to bring the parts in contact, thereby promoting union by the "first intention". The necessity for strips over the lint does not appear apparent, as its absorbing qualities soon attach it to the wounded surfaces.

These primary dressings, need not be removed till the patient complains of stiffness or uneasiness in the parts, which generally occurs in two or three days, owing to the oozing of a bloody discharge. As soon as possible after this period, the dressings should be removed, and the limb covered, with cloths dipped in cold water, or laid in an emollient poultice, moderately warm. The propriety of using cold and warm applications, has long been, and is still, a subject in dispute, among many eminent Surgeons. The amount of relief afforded in preventing or conducting inflammation to a happy termination, is the only sure criterion we have for their use. At one stage of the treatment, cold appears to be more applicable at another, warm — in fact the judicious Surgeon will find it necessary to change these applications according to indications.

It strikes me that the influence of climate, has been neglected, by authors

and gives rise to the discordant views in regard to the use of these two agents. Insti-ances for instance, from a northern climate, suddenly taken to a tropical one, it will be found that warm applications debilitate the parts, and leads to endless suppuration; whilst cold can be applied with the greatest advantage, throughout the treatment. Such is the result of my experience, whilst serving in Mexico, as well as that of many intelligent medical gentlemen with whom I conversed. It requires, I trust, no argument to account for this on rational principles. Every one will admit the relaxing influence of a tropical sun, on a northern constitution.

When the parts are brought into free suppuration, great attention becomes necessary in the dressings to prevent the formation of sinuses by the proper application of pressure with bandage and compress. It is at this stage, if we suspect the presence of

foreign bodies we are enabled to recover them. Under the strong fascia of the thigh and arm, among their long muscles, and in wounds of the back, we have particularly to dread the formation of sinuses. They sometimes however, do form in spite of our best endeavors. Immediately on such discovery, no time should be lost in making free and bold incisions; we can now no longer trust to pressure or any other remedy but the knife – it affords the only hope of relief.

Previous to the event of suppuration, there frequently occurs great tumefaction of the soft parts, tender with great pain and fever; – here too, a prudent use of the knife in removing the thickened condition of the parts is of great service. It is a good rule, perhaps, to say, that incisions in <u>this</u> state, should not be made, unless the parts are confined by strong fascia, and attended with fever and pain.

It is a principle in surgery, that it is more humane, as well as more hon=

=orable to save a limb than perform the most successful operation. At the same time important hints may be gathered from the old adage which says - "it is better for a man to live with three limbs than die with four". In such emergencies, a clear head to decide, and ability to execute, are qualities indispensable for success.

The question whether to amputate immediately, and on the spot, merely allowing the shock, if any to pass off, or delay till inflammation and suppuration occur, no longer admits of dispute. When it is evident from the nature, violence and extent of the injury that there is danger of fatal hemorhage, speedy mortification, or extensive inflammation and suppuration, amputate at once - delay is utterly inadmissible. When limbs have been shattered, and completely detached, or nearly so - in laceration of parts including the principal blood vessels and nerves; fractures of the heads of bones, opening into joints, and in compound fractures of the thigh, am=

putate instantly. Mr. Druit says the arm should not be amputated for almost any musket shot injury; if the elbow (he says) is shot through, it may be cut out; and the fore arm will bear so much cutting and fracture, that it should not be condemned without very great injury to bones and arteries. The amount of "fracture and cutting" the fore arm will bear, I saw signally tested in three cases in hospital, after the battle of Buena Vista. All of which terminated favorably without amputation or "excission." The most important was that of a lad about 18 years of age, serving with the 2nd Regiment of Illinois volunteers, who had both bones of the fore arm fractured by a musket ball, which continued upward, penetrating the joint, and passed out about midway the arm. This case was under treatment from the 28th February, till 1st July, when the lad returned home. He was left with slight anchylosis. —

In the subsequent treatment of the

consequences of gun shot injuries, two important phenomena are likely to arise, which merit especial notice;— in the management of which, more than in any part of the treatment, the true qualities of the medical mind are to be judged— I allude to inflammation and its sequelæ, irritative and hectic fevers.

In treating inflammation, blood-letting is altogether the most important and decisive,— and under judicious management, is a remedy not to be dispensed with. In its use the strength and constitution of the patient, the amount of injury and exciting cause, must be carefully considered. It is important to bear in mind the difference between the suppression of inflammatory action and prevention of it, in determining the extent to which blood-letting may be carried. For instance, a man of good constitution has received a wound involving either cavities of the ~~chest~~ trunk, when it is important to prevent inflammation, the

lancet may be employed largely and frequently, care being taken not to reduce the organic energies below the point at which immediate union of the divided part may be effected. If however the inflammation becomes fairly established, we can scarcely hope to avert it. The loss of blood here too, may be indicated, but certainly more sparingly than in the other instance. Other anti-phlogistics will be necessary to assist in controlling fever and inflammatory action, which must be conducting according to indications, such as opiates, diaphoretics &c - the most important for present purposes is, tartrate potassae and antimony.

The other condition is the opposite of the above, where all our efforts must be directed against the sinking tendency of debility. Frequently occurring on the onset of suppuration. It is marked by emaciation, occasional diarrhoea, profuse perspiration, pulse frequent and small, evening exacerbations, burning in the soles of the feet and palms of the hands, circumscrib-

ea flush in the cheek, and great restlessness at night. The prognosis is favorable if Hectic supervene on recent injuries, but if it be caused by chronic abscess (as sometimes occurs in the stump, after amputation) or wounds of the joints, death generally terminates the scene. The indications in treatment are to allay irritation and support the system. To do which, give opium or its preparations in sufficiently large doses to quiet the system. The strength may be supported by a generous diet, if the digestive organs will bear it, together with Bark. Sherry wine S. Quinine, Cascarilla &c. &c. The preparations of iron will frequently be found of service. — The colliquative perspiration may be arrested by the use, night & morning, of a few drops of the Aromatic Sulph acid. —

I have thus hastily thrown together from memory, the materials of this Essay — most of which being the result of things as I saw them. I

regret not having gone more into detail and minute description. In extenuation of which, and many other defects, I beg to be permitted to say, as apologistic, that the rapid and pressing duties of the session, otherwise occupy every moment of the diligent student. The great error has been, (if in truth error it can be called) in yielding the time to other studies, that was necessary to complete a finished production. Thus I was suddenly hurried along to offer a Paper, which, under different circumstances, might be greatly superior.

An

Inaugural Dissertation

On

Moral Practice,

Submitted to the examination of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

For the degree of Doctor of Medicine

By

George W. Carter

of

Virginia

Feb. 1849

of the gods as well as the mighty chiefs of Greece, the professors of the healing art have, in all ages and countries, held a most prominent place in the estimation of mankind. Even in the most barbarous countries, the "Medicin men", who have generally united in their own persons the offices both of priest and of physician, have uniformly held the highest next to that of the supreme ruler of the land. When this most important of professions took its rise it is impossible to say. When the father and mother of our race, the first-born children of Omnipotence first realized the appalling truth that bounding hearts may cease to beat and beauteous lips may smile no more, when, riven by the earliest bolt of vengeance, they

reacting upon the ailments of the body, our "Moral Practice" might well be made to include a set of duties of a different nature. Secrets of the utmost importance, affecting the welfare of individuals, of families, and sometimes of whole communities, are often entrusted to the keeping of the physician. His responsibility in this case is a most important one. He is often so situated that by a single breath he might mar the sweets of domestic enjoyment and convert the peaceful harmony of the domestic circle into a terrestrial pandemonium. And circumstances also will occur when the utmost perplexity will attend his determinations in relation to matters of this nature.

The path of duty will often be obscured, and he will frequently be at a loss to determine whether he should speak or be silent, whether he should act or remain inert. He will be in doubt whether a word which he deems it his duty to pronounce will be the means of quieting irritation

and settling disputes, or whether it will not blow the embers of discord into ten fold fury.

In such cases, as well as in the sort of "Moral practice" above refered to, the conscientious practitioner will find nothing to guide him in the pages of the ordinary "books." He must look beyond them, and make Man his study, intellectually and morally as well as physically. By so doing he will be enabled to bring an enlightened judgment to his aid in all questions of a difficult nature, and so to mature his decisions that they will secure for him the approbation of his own conscience, as well as the approval of his fellow-men, his country, and his God.

humbly bowed before the Almighty Chastener, and beheld the darling of their hearts overtaken by that fearful mystery called Death, may they not, even then in their agonizing prayers to Heaven for relief, have conceived the first faint notion of the Healing art? However this may be, there can be no doubt that our art is as ancient as it is honourable. It was planted by piety and nurtured by benevolence. Its professors have always held a conspicuous place among the great ones of the earth, and in spite of the disgraceful proceedings of quacks and empirics, the profession has ever stood among the highest in in the estimation of mankind.

Besides the "ministering to a mind diseased" and thence

Moral Practice

There are few things more perplexing to the student than the choice of a subject for his thesis. How is it possible for an inexperienced writer to find anything new or interesting in the hackneyed themes worn threadbare by the attrition of a hundred thousand pens? Shall he attempt to immortalize himself by detailing the novelties of Phthisis Pulmonalis, or shall he enchain the attention of the reader by the wonders of the Sub muriate hydrarg-? Look in whatever direction he will, all is "stale flat and unprofitable" as

"— a thrice told tale,
Vexing the dull ear of a drowsy man."

The candidate for graduation then must perforce take one of two horns

of a dilemma; he must either take his scissors and clip out here and there "unus et alter purpureus pannus", sew them together and call the patch-work ~~his~~ original, or else he must embark upon an unknown sea, take a subject that is not in the books, and discourse learnedly about that of which he knows nothing. After mature deliberation I have resolved to follow the Scotch proverb which directs us "o' twa puddles to choose the cleanest", and to adopt the latter alternative, I have known people to talk by the hour and write by the volume of that which they knew nothing about, and as it did not seem to be very hard work for them, I have concluded that

it would not be an impossibility for me to "go and do likewise".

"The proper study of mankind is man" saith the poet, and of no one is this truer than of the physician. So far as the physical man is concerned this study has been pursued with all due diligence, but can we say the same thing with regard to man's mental and moral nature? I doubt it. It appears to me that we are too much in the habit of looking upon our fellow creatures in the light of machines, and considering them as being operated upon by medicines much in the same way as the steam engine is operated upon by the alternate expansion-

and condensation of watery vapour; and it appears to me that the perfection to which anatomical investigations have been brought, and the great improvements which have been made in the science of pathological anatomy, have had some tendency to foster these peculiar views. Every one, it is true, acknowledges, as an abstract proposition, the important connexion which subsists between mind and matter, but, in a practical point of view, I fear that this mysterious truth is too much neglected. I fear that the mental and moral peculiarities of our patients are not sufficiently studied, and that the science of mind does not

hold the important place that it ought to hold in the estimation of students generally.

When the disease is essentially mental in its character, this matter has been attended to, and most important improvements have been ~~those~~ effected. The history of the straight jacket, the fetters, and the lash, the favorite therapeutic agents of the olden time, teem with incidents so revolting that the hardest heart might shudder at the recital. Shrouded in the gloom of some loathsome dungeon, too truly ~~typical~~ of the poor victim's benighted soul, a temporary aberration of intellect was almost certainly converted into incurable insanity.

Alas, alas, what groans of anguish, what agonizing shrieks of black despair will rise up in judgment against the promoters of such horrid cruelty! And even to this day, in semi-civilized countries, the brute beast is treated with far more kindness and attention, than the hapless maniac. A fearful interest attends this subject, for no direr fiend ever sprang from the realms of woe to torture poor humanity, than that which blights its victim with the curse of insanity; and no human being more richly deserves the sympathy and kindness of his fellows than one thus afflicted. To the credit of our race be it said, such sympathy and such kindness

are becoming almost universal, and the tortures once so common will soon be heard of no more, unless "to point a moral or adorn a tale".

But it is not to diseases purely mental that our remarks are intended to apply. Maladies of a very different nature, and those which have no immediate and obvious connexion with the mental apparatus, may be almost universally treated with greater success by having regard to the moral & intellectual idiosyncrasies of the patient. And the converse of this proposition is no less true; for every observing practitioner will agree with me, that we can, in many instances, best "minister to a mind diseased"

by first attending to the condition of the body. The celebrated painter Fuseli, so distinguished for the almost unearthly bizarrerie of his productions, is said to have supped upon pork steaks, and from the dreams thus generated, to have constructed those extraordinary pictures which have given him a world-wide celebrity. Now this may be rather an equivocal example for ordinary artists to follow, but it answers well enough to illustrate the fact, that, as in mechanical philosophy, the action and reaction of mind upon matter, and vice versa, are "equal and contrary", and it is this action and reaction, this important sympathetic relation which

constitutes the foundation of the subject which we wish to treat.

Who knows how much pork steaks, or "devilled kidneys", or gin cock-tails (the name of which was probably then unknown, though they knew the thing right well) may have had to do with the sublimely horrible vagaries of the immortal Byron. The following passage, for instance, from the "Siege of Corinth;"—

" And he saw the lean dogs beneath the wall
" Hold o'er the dead their carnival,
" Gorging and growling o'er carcass and limb;
" They were too busy to bark at him!
" From a Tartar's skull they had stripped the flesh,
" As ye peel the fig when the fruit is fresh,
" And their white tusks crunched o'er the whitened skull,
" As it slipped through their jaws, when their edge grew dull,—

"So they lazily mumbled the bones of the dead,
"When they scarce could rise from the spot where they fed;
"So well had they broken a lingering fast
"With those who had fallen for that night's repast!"

How horribly picturesque! How the reader's ear strains to catch the growling, and snarling, and crunching, as if the revolting banquet were really being enacted before him! And how suggestions of harassing night-mares and terrific dreams, the legitimate offspring of indigestible suppers and strong potations! It is hardly to be doubted that much of the morbid susceptibility of this great poet and unhappy man arose from the mean, paltry prosaic fact of a dyspeptic stomach. He was known to be notoriously fond of stimulants, notoriously

prone to transgress those simple laws the observance of which nature exacts from all created beings, according to their kind, under penalty of sickness, sorrow, and suffering; and much, we verily believe, of the feeling which caused him to—

— — — — — "drop

"Like a wild-born falcon with clipped wing
"To which the boundless air alone were home"

arose from the frequency of such transgressions.

And—

"The self-torturing sophist, wild Rousseau,
"The apostle of affliction; he who threw
"Enchantment over passion, and from woe
"Wrung overwhelming eloquence—"

Who will say that that distempered mind; that diseased imagination, which stripped his soul in misery

and shed its reflected gloom upon all around him, may not have had its origin in that most unimaginative viscus, the stomach? And who will say that hundreds more of the "genus irritabile," whose wayward singularities have been themes of wonder for ages past, may not have owed much of their peculiar temperament to the influence of external circumstances acting upon the organs of digestion & and thence reacting upon their moral natures?

It is curious and interesting to remark the totally different effects produced upon the mind and disposition by diseased action in different organs. Take for instance dyspepsia and pulmonary consumption. The poor dyspeptic is always below par. Mole hills to

him are mountains; and the dark side of the future is always turned in the direction of his mental vision. He groans under the pressure of a thousand imaginary ills and hypochondriac fears, and always fancies his condition to be worse than it really is. In some cases, indeed, no freak of the imagination is too wild to be believed in, and no absurdity too gross for the patient's credulity, provided it tends to substantiate his favourite theory that he is the most wretched creature in existence. How different is the case with the victim of consumption. His spirits are usually buoyant and elastic, and it is with difficulty that he can be induced to think his case a dangerous one. The unnatural bloom upon his cheek, and the unearthly brightness of his eye

like flowers nurtured by the corruption of the grave, are but ~~proofs~~ unholy proofs of decay and death within,

I knew a student once, a noble creature,
"A combination and a form, indeed,
"Where every god did seem to set his seal,
"To give the world assurance of a Man"

He was devoted to study, and it was killing him; but he could never be brought to believe it, and the well meant remonstrances of his friends were scouted as nonentities. He plied his ceaseless task with untiring energy, and needful exercise and healthful rest were almost entirely disregarded. His imagination was a brilliant one, and he often allowed it ~~to roam~~ with a flowing rein to roam at will amid a thousand wild poetic vagaries. "Many a time and oft

I have noticed him, his blood heated by study and his cheek flushed by excitement, standing under the starry canopy of heaven, with the dark chilly vapors of night around him, gazing upon the azure vault above, and drinking in poetic inspiration from sky, and earth and air. Like some prophet of the olden time whose eagle glance could pierce the blue empyrean and hold communion with that bright seraphic choir which surrounds the ~~eternal~~ throne of the Eternal God, his eagle glance seemed to look beyond the things of time and sense, and with the telescopic power of genius, to penetrate the dusky veil which seperates the world of matter from that "undiscovered bourne whence no traveller returns,"

The syren voice of pleasure, though tuned to melody as sweet as the fabled music of the spheres, had no power to melt his iron soul to softness; for ambition breathed a far ~~martial~~ more potent strain, and drowned the voluptuous accents of the Cyprian goddess in a flood of bolder harmony. The day of his graduation approached, and the goal of his hopes had been won triumphantly. Every thing was prepared, and the highest honours of his college awaited him. But there, in the guise of learning's proud professor, sat enthroned the tyrant Death, who twined a cypress with the laurel wreath - and at his feet the Martyr Student perished.

How many of the mighty

ones of the intellectual arena have trodden in his footsteps and gone down to the grave without one thought of the doom that awaited them. Ambition sways a fearful power over the minds of men. On the battle field, where red Destruction waves her banner over the ensanguined plain, trampling down the dying and the dead, and revelling in carnage, ambition's votary is seen, embodied in a soldier's guise, and stemming the crimson torrent wherever glory may be bought with blood. On ocean's wave, braving the storm, the dark lee shore, the fight, the seaman follows her to fall at last in victory's gory arms. But more than these, than all, perhaps, the <u>student</u> listens to her syren voice, and surrenders

himself a willing victim to her blandishments: and alas, how often does the dark demon of consumption step in and bear away the poor deluded sufferer to the grave, in the very spring time of his hopes, "with all his blushing honours thick upon him"!

In cases like these the physician should be on the alert, with watchful eye and ready hand, prepared not only to administer the necessary medicine but to observe the varying phases of the patient's mind, and to advise, to warn, to cheer, or reprove according to the circumstances of the case before him. How often do we see our remedies of no avail and our prognosis falsified at

the very moment when our hopes are brightest? And how often, in such instances, will a careful examination of the moral condition of our patient reveal to us the true cause of our want of success, and enable us by "moral practice" to find both cause and cure.

See yonder lovely maiden whose fragile form hath scarce received the warmth of eighteen summers. But a few short months ago, she presented to the admiring beholder a spectacle of peerless loveliness. No flower that blushes in the gay parterre could rival the delicate tint upon her cheek, and heaven's own lightning seemed to flash from the midnight darkness of her eye. Her step was that of the bounding fawn, and

the music of her voice would fall upon the listener's ear like stray tones from the harps of heaven. Her very laugh was melody and its joyous notes were but the overflowing of a heart brim full of gladness. Alas, alas, how changed the scene is now! Paler than monumental marble droops that lovely face, a lily stricken by the storm, with tears like dewdrops falling thick and fast. Slowly and painfully she moves along, and as ever and anon she raises her melancholy eyes to heaven, what unutterable sadness we behold depicted there! A hollow cheek and glazy eye have replaced those beauties which caused her to be "the observed of all observers," and every lineament of her attenuated face seems

prophetic of an early death,

That gray-haired man whose hands are clasped in speechless agony is the sufferer's father, That comely matron whose eyes seem to have no other use but to gaze upon that wreck of loveliness and melt in tears at the sight, is her poor grief stricken mother, Wretched wretched parents! The pride of their hearts, the crowning blessing of their lives, is about to descend into the damp cold grave, and there is no one to succor or to save,

But look again, What magic influence has been here? Why does the pale cheek mantle with a rosy flush, and the dull eye kindle with the fire of hope once more? Why does the father smile again and the mother weep no longer?

The physician has been there. A judicious man with a feeling heart has kindly and delicately scanned his patient's soul, and by "Moral practice", in a few short hours, and without drug or draught, he has turned the tide of death, and summoned bright-eyed Hope again to the heart whence she had been frightened by the scowling demon of Despair, And now ye scoffers at an "art divine", go if ye can and curl your lips in scorn while pondering on a scene like this! The hapless maiden was the victim of a secret sorrow,

"—— She never told her love,
But let concealment, like a worm i' the bud,
Feed on her damask cheek!"

And her physician, by moral ~~practice~~ treatment, by tenderly

and delicately probing the wound in her affections, has found a moral remedy, the mere suggestion of which has filled her darkened soul with sun-bright images of joy and snatched her beauties from the grasp of Death. Pure, passionate love, "Heaven's last best gift to man", the atmosphere in which they votaries exist must surely be akin to that which is breathed by the immortal Seraphim! Too wildly sweet, too brightly fair would be our earthly pilgrimage, and far too gay its blooming, did no discordant hues of earth disturb the harmonious mingling of thy rain-bow tinted glories.

Man, fallen man, would not bear so close an approximation

to the angels; hence Heaven has wisely decreed that "the course of true love never should run smooth." It is a mighty passion, and when it sweeps over the soul like a tornado, with its lightnings flashing and its thunders rolling, what wonder that the body should be scathed and torn by the shock, and that it should need the renovating hand of "Moral practice" to restore the disordered system to its wonted harmony.

He who has assumed the responsibilities implied in the degree of "doctor in arte medendi," has taken upon himself a task of no trivial importance, since the time of Chiron and Machaon, who, we are told, were favorites

An Inaugural Dissertation On Angina Pectoris,

Submitted to the Examination, of the Provost, Regents, and Faculty of Physic, of the University of Maryland, For the Degree of Doctor of Medicine,

By

Charles Boarman, of Virginia.

Session 1848.49.

Angina Pectoris

This is an interesting and curious disorder, which, until a comparatively recent period, has failed to attract the particular attention of authors. Indeed, the observations on the subject, by Dr Heberden, in the second volume of the Transactions of the College of Physicians, were entirely original, and almost, if not the first accurate account, ever given of the disease. He calls it a disorder of the breast, and observes; "that the seat of it, and the sense of strangulation and anxiety with which it is attended, may make it not improperly called, Angina Pectoris."

The following is the brief but striking description given of it by Dr Heberden. "Those who are afflicted with it are seized whilst they are walking, and more particularly when they walk soon after eating, with a painful and most disagreeable sensation in the breast, which seems as if it would take

their life away if it were to increase or continue. The moment they stand still, all this uneasiness vanishes. In all other respects the patients are at the beginning of this disorder, perfectly well; and in particular have no shortness of breath from which it is totally distinct."

The prominent characteristics of this disease, are paroxysmal occurrences of pain in the precordial region, with almost entire freedom from suffering during the intermission; along with great dyspnoea, a sense of oppression in the chest, and violent palpitations of the heart, accompanied with an awful fear of immediate dissolution, unless averted by speedy relief. These symptoms are usually sufficient to satisfy us of the disease our patient is labouring under, but none is he so fortunate as to escape with them. In the large pro-

portion of cases, the disease presents an array of symptoms, such as I shall now endeavour to describe.

In the paroxysm a shooting pain generally passes through the chest, to the back, thence to the left shoulder, and not unfrequently extends down the arm, where it assumes the character of dullness or numbness. This feeling occasionally extends, to the tips ends of the fingers, transmitted from the elbow along the course of the ulnar nerve. Cases are recorded in which the pain has spread to the anterior of the chest, up the left side of the neck, or down to the left leg; and even to the right side of the body. In females, the left mamma is frequently the seat of exquisite tenderness. There is every grade of suffering in this disease, from a mere aching or dullness, to torturing pain; a paroxysm not-

unfrequently ending in syncope or convulsions. The pulse is often small, irregular, and weak, but occasionally otherwise.

The duration of the paroxysm, varies from a few minutes to half an hour or an hour, seldom continuing longer than this time. In the intervals, the patient has almost entire freedom from suffering; slight uneasiness in the precordial region, with other trivial symptoms common to cardiac affections, being the only sources of annoyance.

The initial attacks are comparatively mild, occurring only upon violent exercise; such as, rapidly ascending a height, particularly in the face of a cold wind; running, jumping and other kinds of violent exertion. The attack comes on suddenly, compelling the patient to stand still, from the

awful apprehension, that death would be the penalty of another effort to advance. This feeling however, wears off after a few minutes, and the patient is enabled to proceed. The supervention of another attack is very uncertain, frequently not appearing for weeks, months or even years. After a while, the paroxysms occur upon the slightest exertion, and frequently without any apparent cause. At this stage of the complaint, the most trivial cause is enough to elicit an attack; any movement of the body coughing, turning in bed, the act of defecation, any mental emotion, and other causes equally trivial.

The preceding is an enumeration of symptoms, as they occur in the more violent forms of the disease, many cases being comparatively slight. In these milder instances the train may be equally severe, but differ in point of duration, and in the inter-

vals of the paroxysms. A person may suffer an attack of this disease early in life, escape from the suffering it usually inflicts for a number of years, and finally, in old age, become its victim; in all probability a single attack proving fatal. This however is not a very common occurrence.

Pathology

The pathology of this disease is still involved in great obscurity. That it is seated in the heart, scarcely admits of a question; and the weight of opinion appears to be in favour of considering it a nervous disorder, beginning generally in the pneumogastric nerve, and spreading thence in other directions, as other nerves become involved. The supporters of this opinion have adduced a number of circumstances which render it very probable. In a great many patients who have died of the disease, dissection has failed to

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discover any traces of organic disease of the heart. Another fact which renders the opinion probable is, that structural disorder has been discovered in those who never laboured under Angina; and this lesion is precisely that, to which a great many attribute the disease. It's occasional spontaneous disappearance, and its susceptability of cure, are also strong arguments in favour of its being a nervous disease. Some writers maintain, that the pneumogastric nerve is invariably the seat of the affection, when the pain is confined to the heart and lungs. Heberden, Kreyig, and Parry ascribe it to ossification of the coronary arteries, and adduce a number of arguments in maintaining their position. Watson, whose opinion is pretty much the same as that of these gentlemen, in speaking of the opinion which ascribes it to the nerves says: "But this opinion is scarcely consistent in my

indgement with the facts — first, that the paroxysms are excited by such causes as are "especially calculated to disturb the natural action of the heart, bodily exertion and mental emotions" and, secondly, that the disease is so very frequently and so suddenly fatal."

Others have attributed it, to ossification of the semilunar valves, and various other structural disorders of the heart and adjoining parts; such as, morbid dilatation and softening of its structure, suppuration inflammation of the mediastinum, and disease of the pericardium. No one of these conditions can be considered to explain the nature of Angina, for the same reasons that ossification of the coronary arteries cannot, that, patients who have died of the disease, have shown upon examination no such lesions; and on the contrary these lesions have been

frequently observed in other varieties of cardiac disease.

Causes

Although the causes of this disease are exceedingly obscure, a great number have been advanced, and the opinions on the subject, are of a conflicting nature. Very different conditions of constitution have also been mentioned as predisposing to the affection. By some, plethora has been referred to as a frequent cause: By others gout, and the gouty diathesis. By others again, it has been referred to affections of the pericardium, to spasm of the diaphragm, and to organic diseases of the Liver, and other abdominal viscera. Dr Parry who has given a great deal of attention to this disease, and to whom, we are indebted, for very much of our knowledge con-

cerning it, says; that he has been
led to conclude from his personal
observation that the disease was
caused in a great majority of
cases by ossification of the corona
ry arteries. It is very certain that
ossification of these arteries, produ
ces many symptoms common
to Angina Pectoris; but then again,
we have the disease without ossi
fication, and we have ossification
without Angina. A very plausible
hypothesis, is that, which ascribes
the disease to structural disease
of the heart, or great vessels, in
which, some portions of them, were
deprived of their elasticity by carti-
laginous or osseous degenerations;
and that the pain was owing,
to over-tension of the rigid portion.
Dr. Chapman has advanced the
opinion, that Angina is a gouty

affection, and probability is lent to this opinion, from the well known tendency of gouty irritation, to favour the deposition of calculous matter, in the fibrous tissue. Dr Todd in his admirable book, speaking of the causes of this disease, says; "So far as my personal observation has gone, neuralgic affections of the heart have generally occurred in persons who have inherited a gouty or rheumatic diathesis, but whose habits of life, more abstemious than those of their forefathers, have prevented the ordinary inflammatory development of those diseases, and given them a disposition to assume the neuralgic form." The truth is that the causes and pathology of this singular and fatal malady, are equally obscure; and any one of the causes we have mentioned, as likely as another, to give rise to it; and we are not certain

that any one of them will do so. An anæmic or chlorotic condition of the circulation, debility and nervous derangement generally, seem to have some influence in its origin. In persons of a gouty or rheumatic habit labouring under the disease, alternations, with neuralgia elsewhere, is by no means uncommon. It has been supposed to be caused by long continued, and deep distress of mind. The disease frequently comes on, when the stomach is oppressed with food, distended with flatus, or irritated with acid or indigestible matter. Females are less liable to suffer from it than males, and when they are attacked by it, it is always in its mildest form. These are the causes most frequently mentioned by authors; but many more are men-

-tioned by some. Prognosis

The prognosis of Angina Pectoris is always exceedingly grave. There can scarcely be a probability of its favourable termination, when accompanied or associated with, structural alteration of the heart; and this is very generally the case. The patient may, however, survive a long time with a considerable amount of alteration, but an entire cure can scarcely be hoped. When dependent upon the gouty diathesis, it is also exceedingly fatal, for the reason, that it would be impossible to eradicate this constitutional tendency. As it occurs in some instances, it occasionally disappears spontaneously: In others it admits of cure; and in almost every case, is materially alleviated by appropriate remedies. Death generally takes place very suddenly.

Treatment

In the treatment of this disease as we before said, little more can be expected in the majority of cases, than palliative results. Occasionally we may succeed in arresting the disease by active perseverance, with our remedial measures.

The treatment is generally considerd under two heads. First, those measures proper during the absence of the paroxysm, calculated to prevent its return. And secondly, those proper during the paroxysm, calculated to palliate its violence, and to shorten its duration.

The indications in the interval, though seemingly simple, are by far the most important. They consist in removing our patient, from all influences likely to disturb the equanimity of his temper, or to excite mental emotions of whatever character. He must be forbidden violent exertion,

particularly in the face of a cold wind, or when the stomach is loaded with food. The digestive organs must be strictly attended to, and the stomach kept free from flatulence. Regular exercise, especially on horseback, and in an open carriage, is of great importance. These hygienic measures cannot be too strictly insisted on. The preparations of iron, and bismuth, and the salts of copper and lime, in combination with hyoscyamus, belladonna, and stramonium, may be expected to act with advantage, through the impression they produce on the nervous system. When the attack is anticipated by a large dose of opium, it will probably be averted. Local applications must be used in conjunction with the above remedies. Pustulation with tart of antimony over the region of the

heart; issues and seatons between the shoulders, and in the thighs, & belladonna plaster are all of great value.

When called to a patient during the paroxysm of this disease, we are in the first place, to consider the propriety of taking blood. If the patient be otherwise healthy, and of a plethoric diathesis, we may generally use bleeding with great advantage. If he be habitually pale, and anaemic we are to be more cautious, and take blood, if at all, by cups or leaches.

Some preparation of opium must be immediately exhibited, alone, or what is perhaps better, to give it in combination with other anodynes, antispasmodics, the most appropriate of which, are musk, assafoetida, hydrocyanic acid, and ether. If the disease appears to be in any measure dependent on a gouty or rheum

matic diathesis, we must administer the remedies appropriate in these diseases; such as the wine of colchicum, and the tincture of guaiac. But whilst we are using these internal agents, we must not forget the value of external applications. Hot pediluvia, rendered more stimulating, by the addition of cayenne pepper, and mustard, with rubefaction over the heart, and blisters to the region of the spine, and between the shoulders will all assist very materially our internal remedies.

fever which is immediately referred to the decomposing matters before spoken of.

We do not deny that this decomposition is deleterious to health; on the contrary, it is easy to conceive how this may have been the debilitating cause which allowed the poison to act & it doubtless strongly predisposes to disease.

The strongest case which has come to our notice, in favour of the theory under consideration, is the following. A highly intelligent physician, informs me that while he was a student many years ago in a hospital here in Baltimore, there was one ward adjoining a garden in which a large mass of vegetable matter was undergoing decomposition; & that almost every patient who entered this ward was seized with some form of malarious fever, while no other cases existed in the house. This circumstance having attracted attention, the peccant matter

was removed, after which no more fevers occurred. This it must be admitted is a strong case & if others of the same character were of frequent occurrence, the cause of malaria would be known beyond dispute. But unhappily this is only an isolated instance & though of considerable weight, cannot of itself be conclusive. The circumstances here related may have been mere coincidences. Perhaps our informant — who by the way is a firm believer in this theory — was biased in his observation of the facts by opinions previously entertained. Or the decaying vegetation may have been only a debilitating influence acting upon those who had already been exposed to the malarious poison & consequently not the cause of the fevers but merely a circumstance favourable to the action of that cause. In view then of all the facts before us, we must conclude, in the present state of our knowledge, that vegetable decomposition should be looked

upon, not as the cause, but a very frequent accompaniment, of the generation of malaria; An accompaniment which though not essential, is a condition highly favourable to its developement.

Another theory on this subject, deduced principally from the observations of Dr Ferguson before referred to, declares that every thing necessary for the evolution of malaria, is that a soil capable of absorbing moisture, should be thoroughly soaked, & afterwards dried by a hot sun.

This is the theory which Dr Walson supports. The pernicious effects said to be produced in certain cases by turning up lands to the sun, with the plough, for the purpose of cultivation, mentioned by Rush & others, would seem to favour this opinion. Now it is obvious that the same objections which were urged against the other theory are equally applicable to this. There are numerous

places where the alleged necessary conditions are present, without the production of malaria & on the other hand, malaria is often abundant, where they are not complied with. In short there is not the least absolute proof that this theory is true. It is after all a mere hypothesis & no better than any other which might be started.

Again we are told that all the phenomena of malaria may be accounted for by the variations of atmospheric conditions, such as heat cold moisture &c & that all this speculation about the source of an imaginary gas, emanation or poison, of the very existence of which there is no proof, said to produce certain fevers, is unphilosophical. There are however strong considerations, which lead us to think that malarious fevers depend upon something more than mere atmospheric vicissitudes.

The peculiar & unique character of these diseases would seem to warrant the opinion

of an extraordinary cause. They are also endemic, occurring in particular localities & the caprice exhibited, in selecting these locations, would appear to direct us to refer them to some cause, specific in its nature, & in the laws by which it is governed.

These diseases are known in the dryest as well as in the wetest places. We may find two situations exactly alike as far as climate & meteorological conditions soil &c are concerned & yet one of them shall be malarious & the other not. On one side of a narrow stream, we may have a country abounding in malaria, & on the opposite shore the inhabitants may be perfectly secure against its influence. These & similar facts, in the absence of proof on the subject, afford a high degree of presumption, that the cause of these morbid phenomena is something sui generis material, & subject to peculiar laws.

By some it has been supposed that malaria owes its origin to animal putrefaction.

But this supposition is liable to various objections, & so far as we are aware, is not entertained by any writer of eminence at the present day. It will therefore be unnecessary to notice it farther

While the efforts of medical observers, to discover the true source of malaria, have been foiled in every attempt, their exertions, to understand, the real character of this poison, have been equally unsuccessful. Though the world has been acquainted with its effects on the human system for thousands of years, its essential nature is far from being understood. The earth, air, water & dew, of these malarious districts have been analyzed by the best chemists, but no result of a satisfactory character has as yet been obtained. It is true that Dupuytren & others have shown that carburetted hydrogen (CH_2) disengaged from the mud of marshes, leaves in the water through which it-

passes, a something capable of speedy putrefactions; & Mr. Julia has made known the existance of a certain matter capable of fermentation, in dew collected in the neighbourhood of marshes. But whether these matters have any thing to do with the generation of malarious fevers, it is impossible now to tell. Prof. Daniell has advanced the opinion, that sulpuretted hydrogen (S.H) is the cause of malarious fevers. This opinion however like all the rest, is more than questionable, & is not borne out by facts.

In view of all that has now been said we may see how little is really known on this subject. How few are the facts which have been established on a sure basis — & these how crude & unconnected! The hypotheses which have been advanced as explainations, are vague, indefinite & unsatisfactory. Some of them have been handed down from writer to writer, until they are now almost looked upon as established, though, the reasons which first led to their adaption are untenable. But perhaps it

may be said, that by rejecting all these theories, we make matters worse — that what was before indefinite is thus rendered still more so. We answer, that it is far better to be aware of how much we really know on this subject, than to think we understand every thing when we know absolutely nothing. These hypotheses are entirely destitute of demonstrative proof, or a high degree of probability, & we consider it far preferable to be without a theory upon any subject, than to be hampered in & biased in its examination by a false one.

Finally it ought always to be borne in mind, that theories in the science of medicine, as in many others, have done more to retard its progress, to introduce false notions & opinions, than all other causes combined.

It should also be remembered, that patient long continued & persevering observation is the only true source of knowledge in our profession; & he who establishes one single fact upon this sure basis, will have done more towards the elucidation of this great mistery than all the theorists who have ever proposed its explanation.

flax, we have but little to say. We have never seen any of these cases fully detailed & consequently know nothing of the circumstances under which they occurred. The malaria may have been produced by some other cause. Or perhaps the process in these cases was carried on in malarious districts where the fevers were generated in the ordinary way, & referred to the steeping, because those who observed them held the theory under consideration. We know that in Italy where malarious diseases are as common as in almost any part of the world, the pernicious effects of steeping hemp &c are fully believed in, & prohibitory laws have been enacted.

Dr Dunglison in his works on hygiene, tells us, that the process of preparing hemp is largely carried on in Virginia, without any reason to believe that any bad effect of this nature results. Finally we presume that it is just as easy to explain these cases without the hemp

& flat, as to show why malaria does not cause its presence, where all the circumstances which are said to be essential to its evolution, exist.

The cases where malarious diseases are said to be generated during the decay of vegetable matter in the holds of ships, are well known to be rare. Ships are almost always free from these fevers, except in cases where they have been contracted on shore. There seems to be good reason for the belief, that the malarious poison may be imbibed into the system, & there remain apparently inactive for a long time until perhaps some debilitating influence acting on the constitution, & depressing the vital powers, allows its latent energies to be aroused. Now if this be so, these cases are easily explained. The sailors perhaps land on some malarious coast & after breathing the tainted atmosphere, again put to sea & after a longer or shorter interval are attacked with

influence. What is that something?

Since the Italian Physician Lancisi published his work "de noxiis paludum effluviis" the great majority of writers, have believed this question satisfactorily answered by the theory that malaria is generated by the humid decomposition of vegetable matter under a high temperature. This ~~the~~ theory had its origin in the fact that marshy districts in hot countries have as a general thing been always most subject to malarious influences. Now in these moist warm situations, we have all the conditions most favorable for the luxurient growth & consequently decay of vegetable material. It was observed too that malarious diseases were most frequent & fatal during the decay of this vegetable matter, & hence the conclusion that these two occurrences were related to each other as cause & effect. The advocates of this theory affirm that these circumstances in kind

if not in degree are invariably present wherever the malarious influence is felt & that there is scarcely a spot on our globe in warm climates, where they do not exist.

They declare that malarious fevers may be traced directly to decaying vegetation as their cause & give as examples of this the fevers which are said to be produced during the process of steeping hemp & flax & during the decomposition of coffee, sugar, rice, chips & shavings & other vegetable matters in the holds of ships. Let us examine each of these positions. It is affirmed in the first place, that the humid decomposition of vegetable matter is always present & essential to the generation of malaria & consequently its cause. If this be admitted we may legitimately conclude, that malaria ought always to be produced wherever the conditions assumed exist, without some cause to prevent their acting, & that.

it ought to be generated in greatest profusion & act with the greatest virulence where ceteris paribus, the humid decomposition of vegetation goes on most actively

It is however well known, that vegetable decomposition often goes on under the most favorable circumstances apparently for the production of malaria, & yet no morbid influence of this nature is evolved. There are districts of country in Louisiana & Mississippi where though the land is wet & swampy & vegetation flourishes in boundless profusion, no malarious fevers prevail. So with Dismal Swamp & other places of the same character in the south-eastern portion of the United States. It is not an uncommon occurrence to find a malarious situation lying almost side by side with another which is perfectly healthy, without any thing so far as vegetable decay, heat moisture &c

are conceded, sufficient to account for the difference. A case of this kind occurring in Vermont, was related by Prof. Smith in his introductory lecture of the present course. The village of Newark in Delaware — where I resided during the four years prior to my commencing the study of medicine — is one of the most healthy places I have ever seen. Malarious diseases are there unknown unless introduced from some other location. And yet this village is situated in a moist low wet country, with vegetation flourishing in the greatest abundance. A priori we should consider this a place extremely favorable to the developement of malaria. Yet such is not the case. This is not because the temperature is not sufficiently high, for malarious diseases occur much farther north. They occur also almost on the same parallel of latitude on the banks of the Schoylkill near

Philadelphia & on the Delaware not more than ten miles distant. It is not for want of moisture for the soil is wet, low & in many places swampy. It cannot be for want of decomposing vegetable matter, for this is abundant. Here then we have every thing which the supporters of this theory could ask, for the generation of malaria, without as far as we can understand the slightest circumstance to prevent them from acting, & yet nothing of the kind is observed. Again, if the theory which we are considering be true, then ought it also to be true, that malaria is not present at all or at least in very small quantity, where the conditions assumed as necessary for its existance, as far as our senses can determine are inappreciable.

In opposition to this however, numerous facts may be adduced. Sir Dr. William Ferguson's celebrated paper on the history

& nature of the marsh poison" read before the Royal Society of Edinburgh in 1820 many cases are related, which show conclusively, that such is far from being the case. Dr Ferguson gives numerous instances observed by himself during the campaigns of the "Peninsula war" & in Holland, in which malarious diseases of the most malignant character, prevailed when the earth seemed as dry as a "brick ground" & where it would appear impossible for vegetable matter in a state of decomposition, to exist.

Now although we cannot absolutely prove the entire absence of the alleged cause of malaria in these cases; yet it must be admitted, if the cause was present at all, that it must have been in very small amount & therefore wholly inadequate to produce the effect ascribed; for there is no one I presume who contends, that the effect of the malarious poison, is not in a great degree

proportioned to the dose taken.

In Calvert, one of the most southern counties of this State, where I resides malarious diseases are very common. This County is a sort of peninsula placed between Chesapeake Bay & Patuxent River, with marshes at intervals along the margins of both these streams. The surface is very irregular, being sometimes hilly & elevated, sometimes flat & low. In fertility, the soil is as variable as the surface. Malarious fevers prevail in every portion of this County. Their influence is felt alike, where the soil is rich & productive, & where it is almost barren; among the hills along the bay, & the lowlands on the river. Many of the very worst cases of remittent & congestive fevers, occur in those almost sterile districts, which produce scarcely any thing but pines, & far removed from any thing like a marsh. I saw during the past summer a most aggravated case of

congestive fever in a situation of an removed from any marshes, where the soil was extremely poor & hardly covered with vegetation. Here in vain might we look for vegetable decomposition adequate to produce such an effect. Such instances are by no means rare in other localities of the same character, remote from marshy districts, with hills & forests intervening. Now if vegetable decay be the cause of malaria, why does it happen that its effects are equally as evident if not more so, where the alleged cause is comparatively absent, as where it exists in greatest profusion?

In the second place the supporters of this theory affirm that or malarious fevers may be traced directly to the decay of vegetable matter as their cause — in the steeping of hemp & flax & in the decomposition of coffee, sugar, rice chips shavings &c in the holds of ships. With regard to the fevers said to be generated during the process of steeping hemp &

An

Examination of some of the Theories
Proposed to explain the Source of Malaria
Submitted as an Inaugural Dissertation
To the examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland
for the
Degree of Dr. of Medicine
By
Wm P. Dorsey
of
Maryland

The diseases usually denominated malarious have attracted the attention of medical men from the earliest ages of our profession to the present time.

The vast portion of our globe over which they prevail, the malignity & fatality of many of their forms, the variety & singular nature of their manifestations, are circumstances which have long rendered them subjects of inquiry & reflection, to the curious & observing & of the highest interest to every intelligent physician. Earth's fairest regions her very garden spots, are the seats of these diseases, & thus are rendered almost unfit for the abode of man. Dr Macculloch thus graphically describes their effects in portions of Italy "Death here walks hand in hand with the sources of life, sparing none: the labourer reaps his harvest but to die, or he wanders amidst the luxuriance of vegetation & wealth, the ghost of man, a sufferer from

his cradle to his impending grave; aged even in childhood & laying down in misery that life which was but one disease.

Man is so constituted that his nature prompts him, to examine into the causes of all that occurs under his observation; especially those things, which in any way affect his interest or his happiness: & if the true cause is not evident, or entirely concealed from his view, he will make up an explanation to suit his own notions of the subject.

Such has been the case with the class of diseases before us. The great obscurity in which their origin is involved, has led to the suggestion of numerous theories for the purpose of explaining the various phenomena which they present. It is the object of this article, to examine whether these theories are satisfactory expositions of the facts or whether the whole subject is still sub judice. Before however

proceeding to the consideration of our main object, it may be proper here perhaps, briefly to notice some of the names which have been employed to designate the immediate cause of the diseases under consideration. The terms which have been most frequently thus used, are Marsh poison, marsh miasm & malaria. The first two of these, are used synonymously, & mean about the same thing. The objection has been justly urged against them however that they direct us to look to marshes alone, as the sources whence this deleterious influence emanates, & have therefore been abandoned, by the best authors of the present day.

Malaria is a word of Italian origin meaning ~~xxxxxx~~ bad air without any reference to its source. This term may also be liable to some objection on account of its being vague & indefinite; but the thing to which it is intended to apply, is no less indefinite

& is far from being accurately understood

This then is the term which we shall employ, meaning not simply to bad air, but as referring to the cause of the morbid phenomena before spoken of; whether that cause be bad air, or a combination of atmospheric conditions such as heat cold moisture &c, or whatever else it may be

It is admitted by all I believe that a considerable amount of heat is necessary, for the evolution of malaria. It is never generated in high northern latitudes & is most abundant in the hottest regions of the globe. But heat alone it is also admitted is not sufficient for its production for a high temperature exists in many places & yet no malarious diseases prevail

This high temperature then must act upon or in conjunction with something else in order to the evolution of this morbid

he wanted to. —

In Chronic Pleurisy there being very little fever and but seldom any pain, our attention is chiefly directed to the most marked feature of the disease, the effusion. and to get rid of this is our main object in the treatment.

The lancet is used very moderately here, and only when absolutely indicated, from the occasion of fever and pain. In most cases when depletion is necessary cups will be the best means of which to effect it; for they not only act as depletives but as revulsives. But our most efficient means are purgatives, diuretics and diaphoretics; and when the fever has subsided, large blisters applied one after the other over the seat of the disease. Pustulation of tartar emetic is occasionally resorted to. Iodine may be used too, with reference to its absorbent powers both internally and externally.

If the patient can bear it he should be strictly dieted; but if he is debilitated of

course he must be allowed a generous diet, and in addition have his system sup-
-ported by the use of mild tonics. —

absorption or evacuation.-
The first of these is accomplished by the lancet, accompanied with small doses of tartar emetic.
The second, is also influenced by the use of the lancet, especially when the fever is high, but when there is not much disturbance of the circulation, cupes are by far the most useful means we have for moderating pain. After the fever has subsided and the pain still continues, so that the patient cannot sleep, opium or some other anodyne may be administered at night followed in the morning by a brisk cathartic.
The third, is accomplished by the administration of calomel, so as to affect the system, and diaphoretics to determine to the skin.
The best means we possess for the accomplishment of the fourth indication, are drastic purgatives, diuretics, diaphoretics, and when the fever has subsided blisters. If these fail to accomplish absorption, and the patient is likely to suffocate only then the operation of Paracentesis thoracis may

state of things. Egophony is frequently present towards the base of the lung, when the effusion is small; and bronchophony and bronchial respiration generally heard about the summit: the natural respiratory sounds are also sometimes mingled with the two last.—

The duration of this disease as its name implies, is of much longer continuance than acute Pleurisy: seldom terminating, in less than two or three weeks, though in the great majority of cases, it does not ever terminate then: but is continued on through various lengths of time. Sometimes for months, and even years.—

When a case is about to terminate favorably, either absorption predominates over effusion; and in this way the liquid is gradually gotten rid of: or else an opening natural or artificial is effected through which it escapes. But always, because of the length of time the lung has been compressed, the air cells become obliterated, and consequently unable

to assume again their natural place and function. In consequence of this compression of the lung and its inability to expand, as the liquid is absorbed or drawn off, we always have more or less deformity of the chest. — If the patient, be one of middle life, or aged, this deformity will be apt to exist during the residue of his life; but if he be young, his chances of having the symmetry of his chest restored, are very much better. —

When a case terminates disastrously, the fatal issue is usually brought about by the gradual wearing out of the powers of life, consequent upon the continual interruption to the respiratory and circulatory systems. But sometimes even after part of the fluid has been absorbed, instead of the chest contracting to fill the space, gaseous products are thrown out, which exert a noxious influence upon the system, and thus produce death. Or at times on opening from one of the bronchial tubes or through the walls of the thorax communicates with the ~~cavity~~ pleural sack, thus permitting atmospheric air to come in contact with the effused fluids, which immediately causes decomposition

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to take place; and from the continual purulent discharge necessarily following, hectic fever arises and carries off the patient. —

Causes. The most frequent cause of this, as well as most other inflammations is a sudden check of perspiration, produced by exposure to cold, while the body is overheated or fatigued. But there are many others which, also frequently give rise, to attacks of the disease; among these the presence of tubercles in the lungs is conspicuous. Penetrating wounds of the chest always gives rise to more or less pleurisy, so do also attacks of Pneumonia. These are the chief causes, and all I deem it necessary to enumerate. —

With regard to the prevalence of the disease, it may be remarked that it has been observed to occur more frequently in men than women, no doubt because they are more exposed to the exciting causes. It generally prevails in the latter part of the winter and in the spring; and sometimes appears to be epidemical.

Diagnosis.

The diagnosis of Pleurisy is generally simple but sometimes also exceedingly difficult, indeed occasionally impossible; its existence not being known until revealed after death. –
The only diseases with which it is liable to be confounded are Pleurodinia, Pericarditis and Pneumonia. – In Pleurodinia we have only pain which is generally of a shifting character, and some little diminution of the respiratory murmur consequent upon that pain. With the exception of these two; all the symptoms and physical signs of Pleurisy are absent: so that the distinction between these two diseases is quite easy. –
Pericarditis presents us also with two of the indications of Pleurisy; these are dullness upon percussion and the friction sound. But the dullness here is more circumscribed than in Pleurisy and not liable to change its position, when the patient varies his. The friction sound is also fixed in its position. –
Pleurisy is more apt to be confounded with Pneumonia

than any other disease, and indeed until the introduction by Laennec of auscultation and percussion the two were not distinguished at all, but went under one common name. Now since the physical signs have been studied in each disease the diagnosis is made comparatively easy.—

The pain we have in Pneumonia, is much less sharp and concentrated than in Pleurisy, and indeed unless there be some pleuritic complication there is very little pain in Pneumonia. The expectoration in the two diseases is very different; in the second stage of the one, we have the sputa of a brick dust, or iron rust colour: and in the other, it is white, frothy, and sometimes striped with a little blood. Frequently there is no expectoration at all in Pleurisy.—

The physical signs are even more distinctive than the general symptoms. For in Pleurisy, we have both the friction sound, and egophony, which are totally absent in Pneumonia — unless as I said before, there be a pleuritic complication —. and on the other hand we have in the latter disease, the crepitant-

rale, which is wanting in the former. Bronchial respiration exists in both diseases but over a greater extent of surface in Pneumonia.
When we percuss a Pneumonic chest we have dullness just as in Pleurisy, but it is not quite so well marked; nor is it ~~so~~ liable to change its position as in the ~~the~~ disease last named.
The vocal thrill is felt very distinctly, and the chest always retains its natural size in Pneumonia: but in Pleurisy this thrill is totally absent, and the chest sometimes enormously distended.
Chronic Pleurisy has sometimes been confounded with Phthisis, but they can be very easily distinguished by observing either the degree of dullness or its position.

As to the <u>Prognosis</u> of Pleurisy, it may be said that, in its recent uncomplicated forms when treated early it is always favourable: and even when a considerable amount of effusion, is thrown out, it generally yields to treatment, unless it should become purulent, then of course the prognosis will be unfavourable.

for a medium through which sound may be transmitted; and accordingly we have the vibrations of the larger bronchial tubes — bronchial respiration — conveyed through it to the ear, as it were through an internal stethoscope. — The nearer we approach to the summit of the lung, the more distinct is this bronchial sound; but, sometimes, when the effusion is very great, we do not hear it there, because the whole lung is completely enveloped in the liquid.

Another very interesting sign is Egophony, which is the name given to a "tremulous, quivering, or bleating sound of the voice", from its supposed resemblence to the bleating of a goat. It is heard after a moderate effusion has taken place, and a thin stratum of liquid intervenes between the compressed lung, and the side of the chest. And it is the bronchial sound passing first through the compressed lung, which is an excellent conductor

of sound; and then through a thin layer of trembling liquid, a coarse one, which causes this singular and remarkable sound.
It is thought by Dr Williams, that this sound is very indistinctly heard, after the stratum of liquid, is over an inch in thickness, ex-cept immediately over the larger bronchial tubes. We generally hear oegophony in the early and latter stages of pleurisy, as the effusion increases, and again as it decreases: but not while it is at its acme.
It does not occur so frequently in men, as it does in women and boys, probably on account of the higher tone of their voices. —
These are not the only signs we have of existing effusion. By simply placing one hand upon the well side and the other upon the one suspected, we are at once struck with the want of the respiratory or vocal thrill if effusion exist: and if the effusion is great by its total absence.
Another way to ascertain whether there is

much effusion or not, is by exposing the whole thorax; and then we are enabled to see at a glance whether both sides rise and fall at the same time, or whether one remains quiescent while the other moves as usual. If it remains quiescent, we are sure that there is something within its walls to prevent its natural contraction; and from the perfect flatness upon percussion, and the total absence of the vocal thrill, we are sure that this is liquid effusion: for if it were air, why then we would have preternatural clearness: or if solidification of the lung, the sounds of the large bronchi would be rendered more distinct.—
Still another sign of effusion is deformity of the chest. Though this is not so common in acute as chronic pleurisy.

The duration of acute Pleurisy is exceedingly variable and uncertain. Frequently an attack of it, if met with a vigorously depletory treatment, will be terminated

in the very outset, before effusion even commences: But this is not always the case, by any means: on the contrary most generally liquid effusion, as well as false membrane, are thrown out; and then the duration of the disease, is of much longer continuance: very seldom lasting less than from three to five days, but more frequently, extending to six, eight, and ten days, and indeed sometimes even more than two weeks.. More in these cases when a cure is effected, it is by the fluid being absorbed, and the plastic lymph uniting, the opposite sides of the pleura. But in nine cases out of ten, after recovery has occurred, there will be some degree of deformity for some time after.-

When a case of acute Pleurisy, is about to terminate fatally, which is a rare occurrence in the uncomplicated form, if properly treated: all the symptoms so

on increasing in severity, until at last, the respiration being carried on so imperfectly, the blood becomes entirely venous, and ceases to furnish a proper stimulus to the heart, and that organ no longer having the power to act, the patient of course dies by asthenia.

Symptoms of Chronic Pleurisy.

These are in most instances, nothing more than the continuation of those of the acute form, though sometimes they are of the same low grade from the very commencement. I shall arrange them in an order similar to that, which I pursued in considering those of acute Pleurisy, and having there spoken somewhat at length upon each one of them, I only deem it necessary in this place, to say a few words with reference to each.

The pain is generally not much complained of, and does not amount to any thing more than a sence of soreness or vague uneasiness; but sometimes sensations of acute pain are experienced.

Cough is a pretty constant symptom, and when occurring in the outset of the disease is generally short and dry; but afterwards is accompanied with a considerable amount of expectoration; when this happens more or less bronchitis is complicated with it.—

But dyspnoea is by far the most prominent symptom in this disease, and the one which causes the patient the most suffering. Though cases do sometimes occur in which it does not give him any trouble while at rest; indeed he may scarcely be at all conscious of any difficulty of breathing then; but as soon as he begins to use any active exercise, he is made sensible of the want of air and is alleged either to desist altogether, or very much to lessen his efforts.

Dyspnoea is usually less troublesome in this form of the disease than in the acute when an equal amount of effusion exists; because it is here formed out more gradually and the system does then not so suddenly to

accomodate itself to the new circumstances. — The fever in this as in all other chronic diseases is generally slight though it is sometimes considerable: and may even assume the hectic form: but this never occurs unless the effusion has become purulent. —

The physical signs are quite clear in this form of the disease. — If we set the patient up and look at his chest we find one side of it — towards its lower part — looking larger than the opposite; and neither rising nor falling as it ought during respiration, and having also the appearance as if it were filled with something which was not natural to it. But what that something is, we cannot tell, until we make percussion upon it; and then we find that it is an accumulation of liquid: because the only sound elicited is perfect flatness, and this always indicates liquid effusion.

The extent of this flatness will of course depend upon the amount of effusion; if

this be sufficient to fill the whole side, why then we will have no other sound over the whole of it: except at a small space with scapular region where lies the root of the lung and when of course it must come nearest the surface. –

When the effusion is more moderate it only occupies the most dependent part of the pleural cavity, thus giving us dullness there and clearness above where lies the lung.

And now to be satisfied that this dullness can be produced by nothing but liquid we have only to make the patient change his position, and then, if it be liquid, the sounds will change correspondingly.

When the chest is completely filled with liquid, auscultation may be said to tell us nothing, except in a negative way. In fact the whole side presents to ear a perfect blank as regards all sound, if we have neither egophony nor bronchial respiration. – But in milder cases, we have rather a different

Sometimes it is a little softened, so that it can with comparative ease be scraped from its adhesions with the lungs; though this is not of frequent occurrence in acute Pleurisy.

Chronic Pleurisy. — This being nothing more than a continuation of the acute, its anatomical characters present a similar appearance, though as a matter of course somewhat altered by the effects of time. The deposites of false membrane are much thicker and often composed of layers of different consistence, harder or softer according to the time of deposition; those formed first being the hardest and adherent to the pleura; those formed last being softer and nearer the surface. The liquid, though at times limpid and transparent, as in most cases of the acute form, is generally rendered more turbid by the numerous little flakes of albuminous matter, which float about in it. At other times again it is purulent and

possessed of an extremely offensive odour. —But this only happens when atmospheric air is in communication with it.—.

The quantity of fluid thrown out, is as a general rule much greater than in acute Pleurisy; it is sometimes so enormous that it compresses the lung into a mere cake; though it does not stop here, for after the lung ceases to yield to its pressure, it causes the ribs to separate, thus widening the intercostal spaces, and pushing them outwards with the bones, so as to give to the affected side of the chest a smooth and swollen appearance: More than this, it pushes downwards the diaphragm, displacing, if it be upon the right side, the liver, or if upon the left, the stomach and spleen. The mediastinum and heart are always more or less displaced.—

When the disease is uncomplicated and the effused liquid not of a purulent character, it sometimes happens that after

a considerable time it is absorbed. But in consequence of the length of time which the lung has remained compressed, its texture becomes entirely changed; instead of the light spongy, crepitant substance, which characterizes healthy lung, we have a hard compact piece of flesh that does not crepitate upon pressure, and is completely impenetrable to air, because of the adhesions which exist between the coats of the air cells. The lung being no longer of any use, and not capable of expanding, atmospheric pressure exerts its influence upon the ribs, diaphragm and mediastinum, to force them to fill the place formerly occupied by the liquid.—

Symptoms of Acute Pleurisy.—

The initiatory symptoms are usually a chill and a sharp pain in the side, accompanied by cough, short, quick and laborious breathing and fever. Each one of these, as well as the

physical signs, require to be noticed more at length.—

With regard to the first of these, the chill, it will be necessary for me to say but little: suffice it to say, that usually it is not very severe, lasting but a short time, and then pretty promptly followed by a corresponding reaction.—

The next symptom to be noticed is one of vastly more importance as a diagnostic sign; namely pain. It is somewhat irregular in its accession, generally coming on, at the same time with the chill; though at one time it may precede, and at another, not come on until after it.— It may be at first vague and fugitive, but soon becomes fixed, and then constitutes one of the most characteristic features, of the disease; and is generally referred by patients to a point—(the more circumscribed it is, the more acute the pain.—) somewhere in a line with, or immediately beneath, one or other

of the breasts; and this is the case even though a large portion of the pleura may be in a state of inflammation. - Again it may be felt elsewhere, as for instance at the lower part of the chest, along the cartilages of the false ribs, when the diaphragmatic pleura is suffering. Or it may be diffused more or less over the whole of one side. It is usually described by those who have experienced it - and who we must suppose are most capable of describing it - as being of a sharp, stabbing character, as if caused by some acute pointed instrument, thrust in at that particular point, every time an effort is made to expand the chest in breathing, beyond a certain extent. And it is the fear of increasing this pain that induces patients affected with Pleurisy to breathe so hurriedly and imperfectly: and causes them not only to dread every effort at sneezing or coughing to which the disease itself may give rise;

but also the slightest pressure which the physician may deem it necessary to exert upon the ribs while making his percussion. But sometimes this sharp stitch is not felt, but in its place one of rather a tingling or burning character, such as is frequently felt in bronchitis. And again at other times, it is so mild that it does not amount to any thing more than a mere soreness, or aching feeling of which the patient may scarcely be conscious, until pressure be made upon his chest. In some cases of even acute Pleurisy this symptom is entirely absent, so that pain cannot strictly be called a pathognomonic sign. No matter how severely acute the pain may be in the commencement of an attack, before effusion has taken place; it abates, as soon as that occurs. —

Cough is another very frequent accompaniment of this disease. It is at first short, and dry; but usually as the inflammation

advances, is accompanied by a slight expectoration of mucus. Occasionally the expectoration of mucus is considerable; and sometimes rusty sputa is gotten rid of. In both these cases the disease is complicated: in the former, by Bronchitis: in the latter by Pneumonia. Patients always resist as much as possible, because of the pain it produces, the desire to this cough; which is not paroxysmal in its character, but constant. All cases of acute Pleurisy are not accompanied by cough: for instances are not wanting, in which the disease ran its whole course without its occurrence.

The breathing, is always more or less embarrassed. In the beginning of the attack, the pain that the use of the respiratory muscles give rise to, causes the patient to catch his breath, or that the respiratory movement is incomplete: consequently the number of respirations

increased to compensate for this deficiency. When effusion has commenced, even though the pain diminishes, the difficulty of breathing still continues, and has for its cause, the effusion, which compresses the lung, and thereby renders it impossible for the requisite quantity of air to get ~~into~~ access to it. The degree of this dyspnoea, is not only proportioned to the amount of liquid effused, but also, to the rapidity with which it is poured out; Indeed I might with truth say, that, it depends much more upon this latter cause, than upon the former. When the effusion is rapid, even though it should happen not to be great, it takes the system, as it were, by surprise, before it has had time to accommodate itself to the accident; and compels the well lung, to perform more than its accustomed share of the work of respiration.

Difficulty of breathing may be increased in several different ways after the occurrence of

effusion By lying upon the side which is unaffected, by exercise, by excitement, or in fact by any thing which tends to increase the quantity of blood going to the lungs.

With regard to the fever I shall say but little. It is in most cases considerable and of an acute character; accompanied with a full, hard, and quick pulse: though occasionally the pulse is small and contracted, because of the extreme pain attending the disease. The fever seldom lasts more than three or four days, after which it gradually subsides.

There is another symptom which is not altogether unimportant and of which I have as yet said nothing. It is this; Decubitus. Much has been said with regard to this; some holding that the patient always laid upon ~~his back~~ the affected side; others that he laid upon the well side: and others again contending that he neither a premised one position or the other, but that he in-

-variably rested upon his back. It is now I believe conceded that all three of these were to a certain degree right: for it is observed that in the beginning of the attack the patient inclines towards the sound side: but that after effusion has taken place he varies his position and rests his upon the affected side or else upon the back.

The physical signs are of as much, if not more importance in making out a correct diagnosis in this disease, than the symptoms spoken of above. Before liquid effusion has occurred the only sound which percussion yields us is clearness. And auscultation indicates a slight diminution of the respiratory murmur, which is produced by the pain that the effort at inspiration causes. In addition to the above, we have produced, after false membrane has been formed, by the rubbing together of its opposite sides in the respiratory movement, what

is called the friction sound. This is heard most generally about the middle of the chest because there is the greatest amount of motion. It is but transient in duration, dissipated as soon as liquid sufficient to keep the opposite sides from coming in contact is effused. This friction sound though but seldom perceived, is when perceived in some cases a valuable sign: but it is not so decisive as those afforded after liquid effusion has commenced. Very soon after this on percussing the side complained of, the healthy resonance is discovered to have diminished, and so goes on diminishing in a ratio inversely to the increase of the effusion, until at last we have almost perfect flatness. This dullness or rather flatness commences at the bottom of the thorax and advances gradually upwards, but may be made to appear upon any part of the chest by causing the patient to vary his position. As a general rule the liquid

is at the bottom and the lung, which is of less specific gravity floating upon it: but sometimes this ~~ratio~~ condition of things is reversed; as for instance when the lung is bound down by adhesions. In this case dullness pervades the whole affected side with the exception of the points of adhesion. —

The auscultatory signs are more of a more definite character, instead of the merely enfeebled respiratory murmur, — owing to the imperfect movement of the lungs: — we have, when the effusion is great, an almost total absence of it. This is what may be called a negative sign: I shall now say something in regard to those which are positive in their character. And the first of these, which demands attention, is Bronchial respiration, which supersedes the healthy murmur, in those parts of the chest, where the lung is still in contact with the ribs; but having its air cells compressed so much that it is only filled

accompanies, or is consecutive to, others, which very materially alter its character. Thus, it is sometimes associated with diseases of the biliary organs, in which case, it assumes the name of Bilious Pleurisy; and again, when accompanying a low or typhoid state of system, it is termed Typhoid Pleurisy. In both these instances the disease, owing to its complications is less under the influence of treatment, than the common uncomplicated form.—

The inflammation of Pleurisy has for its seat sometimes, though seldom, both lungs at once, as for instance when it is a consequence of Phthisis: sometimes the left lung only is affected, though most frequently it is the right alone which is concerned in the inflammation.—

In what I have to say in the following pages, I shall confine myself principally to the two most common forms of the disease

the Acute and Chronic.

My plan is, first, to enter into a de-
-scription of the anatomical characters
of each variety of the disease; and then
of its symptoms, causes, diagnosis, prog-
-nosis and treatment. –

Anatomical Characters of Acute Pleurisy. –

The first change, from a state of health,
which we observe, is a slight degree of
redness, which is caused by an injection
of the vessels of the cellular tissue lying
immediately under the proper serous
membrane, and not, as is thought by
some, by the injection of those of the
Pleura itself. – This event of inflammation
is one which we but seldom witness, for
unless the patient dies with some other
disease, while the Pleurisy is in its
incipient stage, all traces of redness dis-
-appear.

Redness which is one of the first in-
-dications of inflammation, is, in most cases

in this tissue, quickly followed by another increased secretion or rather effusion, which may consist of the serum of the blood, of blood itself, of coagulable lymph, or of pus.

The pouring out of serum unaccompanied by lymph from the inflamed vessels, when in moderate quantity, tends rather to subdue, than otherwise, the inflammation; and in this case, the serous membrane, after resolution has been accomplished, remains smooth. But the consequences are rather more remarkable when attending the effusion of coagulable lymph; which latter substance, is first effused in little granules or rather flakes, which taken separately are scarcely visible to the naked eye; but which, when viewed collectively, are rendered quite sensible by the turbid appearance they impart to the containing fluid. At a more advanced period, from some peculiar

attraction between these little particles and the inflamed membrane; they are deposited in thin layers, which adhere to its surface. These layers are soft in consistence at first, and almost transparent as to colour; but soon grow thicker and harder, and assume according to Dr. Watson a grayish, grayish white, or reddish hue, proportioned to the degree of vitality they have attained.—

When this effused lymph begins to become organized we observe little red points beginning to appear in it few in number at first it is true, and these widely separated; but they soon increase their numbers and in the form of little red streaks run in all directions over the whole surface of this adventitious substance. After a while these little streaks become a series of little vascular canals, which in their turn inosculate with the proper vessels of the pleura: and thus the secreted lymph becomes organized and forms what is called a false membrane

which ever after constitutes a living part of the animal economy.—

The effusion in some cases of acute pleurisy is so considerable that the lung is pushed from its place back against the spine, or against the mediastinum, and compressed to about one quarter of its original size. But if this effusion is reabsorbed in a reasonable time, and the lymph, which is poured out with it, does not become organized, the lung, from its inherent expansibility very soon resumes its former place and function. On the other hand when the liquid is absorbed more slowly, false membranes are apt to be formed, and when this is the case, the lung will very likely remain bound down even for some time after the effusion has been absorbed. When this event occurs, a vacuum is formed, which must be filled by something, and accordingly we find the ribs bent inwards and the viscera of

the abdomen pushed upwards to supply this want:-

The liquid thrown out in the acute form of the disease is generally quite limpid, and devoid of all odour; though occasionally ~~quite~~ it is both turbid and possessed of an extremely offensive smell: as for instance when part of the lung has become gangrenous, or as sometimes happens a tuberculous cavity communicating with the bronchia, bursts into the pleural sack, thus allowing the atmospheric air to communicate with the effused fluid, which directly causes decomposition to commence.

Leaving the changes spoken of above, the proper serous membrane is, neither thickened, nor materially softened: though it may sometimes appear to be swollen, it will generally be found, upon inspection, to arise from an injection of the vessels of the cellular membrane, directly beneath it, or from the superposition of layers of false membrane.

When the brain is inflamed, there is generally deep & pulsative pain the head; flushed countenance; throbbing of the carotids; redness & morbid sensibility of the eyes; irritability of temper; transient pains in the extremities; great precordial oppression; irregular respiration; continued watchfulness; visual illusions; early & almost unintermitting delirium; a glaze & blood-shot appearance of the eyes; contracted pupils; gloomy and agitated countenance; continued moaning & coma.

There is another modification of typhus — the Congestive, which is characterised by the following phenomena, — a want of febrile reaction, after the stage of oppression, the system seeming in an oppressed condition, throughout the whole

or the greater portion of the course of the disease. The vital powers are overwhelmed & oppressed, & the patient appears to sink, progressively, from the moment the disease commences until the vital actions cease altogether. In the more aggravated cases of this kind, there is from the beginning, extreme lassitude & debility, attended with deep-seated pain in the head, with a feeling of weight & vertigo; the face remains pale; respiration is much oppressed & slow; the pulse is struggling, small, feeble, & slow, & variable; the skin relaxed, damp, & usually below the natural temperature; the countenance confused, vacant & anxious, the patient appearing as if stunned by a blow. The eyes are generally dull, watery, vacant, & often red;

the bowels at first torpid; but in the advanced period of the disease often affected with watery diarrhoea. In the commencement, the tongue is pale, slimy, becoming rough & brown afterwards. Towards the close petechia colliquative haemorrhages, & involuntary stools, are apt to occur. Sometimes coma is among the first symptoms, & continues to the end of the disease, and not unfrequently a complete state of insensibility & torpor supervene soon after the disease makes its attack.

Causes.— In relation to the causes of typhus, much difference of opinion exists among physicians. Dr. G.B. Wood says — "The special causes of ~~causes~~ typhus fever are first — the vitiated air resulting from the crowding of human beings in confined places, 2 — a peculiar contagion. The

exhalations from the body & from the excretions probably undergo changes, resulting in the production of a poisonous aëriform matter, which, being absorbed into the system, gives rise to the disease in question. It is not necessary that the individuals who serve as the source of the poison should be diseased, though it is thought that certain complaints favour its production, such as dysentery, gangrene, &c. &c. All that is absolutely essential is, that there should be numbers of persons crowded within confined & ill ventilated places, in which the filth from the excretions is also allowed to accumulate. Hence, the disease has often made its appearance in camps, prisons, ships, hospitals, garrisoned cities, &c.; and hence, too, it is usually most prevalent among the lowest & most vicious people, inhabiting the cellars, lanes, and closely built parts of

cities."

Prognosis. — Among the symptoms which appear to indicate a favourable tendency of the disease, are, — spontaneous vomiting during the first & second days of the disease, more especially when the unpleasant cephalic sensations are thereby abated; slight haemorrhage from the nose, about the 6th or 7th day, of the stage of excitement, is a good indication; a moderate diarrhoea, at an earlier period, is likewise favourable: moderates quenchable thirst, during the stage of collapse, is said to be much more favourable, than when the patient expresses no desire for drink; the most certain sign, however, of a favourable termination, is derived from the state of the sensorial functions. If these are but slightly disturbed during the collapse, the issue will most probably be favourable.

The unfavourable signs are, — a change in the expression of the countenance at an early period of the disease; total want of thirst; violent delirium during the stage excitement; peri-pneumonia symptoms, &c., &c., &c. —

Treatment. — During the forming stage of the disease, the principal indication is to overcome the torpor of the extreme vessels of the surface, & to recall the circulation from the internal to the external parts. For this purpose, an emetic is, perhaps, the most efficient & beneficial means we possess. Vomiting excited by an emetic seldom fails to improve the condition of the skin, & to obviate the tendency to internal congestions. Although especially useful in the cold stage of the disease, emetics may be used also with occasional advantage

in the early period of the stage of excitement. Although active purging anterior to the stage of excitement can rarely be proper, from its tendency to promote the centripetal direction of excitement and the blood, yet mild laxatives ought to be among the first remediate measures. Calomel in large doses, from 10 to 15 grains, generally answers this purpose well. Gentle purgatives are, indeed, among our most useful remedies throughout the whole course of the disease. In the commencement of the fever, it will, in general, be proper to exhibit an active purgative, so as to procure free evacuations. Subsequently, however, it will be sufficient to procure two or three moderate stools daily, by means of suitable laxatives or enemata. Calomel followed by a small dose of castor oil usually answers this purpose very well.

Perhaps the most important remedy in the early period of typhus, with the view of arresting its progress, or moderating its violence, is Mercury.

With regard to the employment of venesection in typhus, much difference of opinion exists among physicians. In the simple form of the disease, it will seldom be necessary to employ the lancet; but in cases where the arterial reaction is strong in the onset of this stage, the cautious abstraction of blood will often be useful. Another very important remedy in the stage of excitement of typhus is the affusion of cold water. Blisters are very variously estimated as remediate agents in typhus. Applied about the period when the stage of collapse is approaching, that is, about the seventh or eighth day of the fever, they sometimes exert a very

beneficial influence on the disease.
In cases of inflammatory typhus, the antiphlogistic remedies must be promptly & efficiently urged. Blood-letting is here our main stay; but in order that it may prove beneficial, it must be employed soon after the supervention of inflammation.
In the congestive modification of typhus, a distinguished physician recommends blood-letting as the most efficient means for relieving the heart & internal organs from the overwhelming load of blood, & re-exciting the oppressed action of the heart & arteries.
With regard to the dietetic management of this disease, it is scarcely necessary to state that the simplest kinds of liquid nourishment are alone admissible. Of these,

however, the patient may be allowed as much as he can be induced to take, more especially during the sinking stage of the complaint.

An Inaugural Dissertation
On Pleuritis.
Submitted to the examination
Of the Provost, Regents, and Faculty of Physic.
Of the
University of Maryland,
For the Degree
Of Doctor of Medicine.
By A. L. Magruder
of Maryland.

Pleuritis

Since it is obligatory upon every student of Medicine before presenting himself as a candidate for graduation, to submit to the faculty a thesis, upon some subject connected with medical science; I have chosen as the subject of mine the disease named above.—

Pleurisy, may be said to be, emphatically, the inflammatory disease of our climate. An attack of it is generally ushered in by a chill more or less severe, followed by fever which in its turn is accompanied by pain in the side, dry cough, difficulty of breathing and disinclination to lie upon the affected side.—

From the simplicity of the membrane concerned in the inflammation, the varieties of Pleurisy are less than those of most other diseases of the same class.—

The Acute and Chronic are the principal forms, though the disease not unfrequently

An inaugural Dissertation on Typhus Fever submitted to the examination of the Provost, Regents and Faculty of Physic of the University of Maryland, for the Degree of Doctor of Medicine, by J. L. Read, of Virginia.

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Typhus Fever.

There is, perhaps, no form of febrile disease, concerning which physicians have expressed a greater variety of conflicting opinions than Typhus fever. Long an object of the deepest interest and attention, it might well be presumed that every circumstance calculated to illustrate its nature & remediate treatment, must have been abundantly noticed & accurately estimated. Whatever industry & carefulness of observation may have been bestowed on this subject, however, the result has not been very flattering, for even at this day there exists great discrepancy of opinion concerning many of the most important points of its pathology & treatment.

<u>Symptoms.</u>—(Premonitory stage).— A peculiar uneasy sensation in the pit of the stomach, want of appetite, slight

giddiness & nausea, pale, shrunk and dejected countenance, dull & heavy eyes, often tremor of the hands, & a general feeling of weariness, debility, and disinclination to mental & corporeal action. These premonitory symptoms usually continue from three to six days, terminating in those which mark the stage of invasion, — viz: slight chills, alternating with flushes of heat; an entire disgust for every kind of food; tongue covered with a thin whitish fur; considerable nausea, & sometimes vomiting; a quick, small, & irregular pulse; a confused and heavy sensation in the head & increased mental & physical depression. This stage generally occupies from six to twelve hours, & terminates in the stage of excitement. The febrile heat now increases considerably, the face is slightly flushed, the pulse

rises in strength & fullness, the skin becomes dry, the lips parched, there is considerable thirst for cool drinks, the tongue becomes more furred & slimy, the bowels are usually torpid, the mind is more confused, the patient fretful, restless & watchful, with an anxious expression of the countenance, the urine is small in quantity and reddish, the head feels heavy, much confused, & vertiginous; during the first two days of this stage occasional manifestations of slight delirium occur during the night. About the end of the second, or during the third day of this stage, slight catarrhal symptoms usually supervene, such as suffused & injected eyes, moderately inflamed fauces, somewhat painful deglutition, more or less oppression in the chest, attended generally with a short dry cough. There is

often some tension & tenderness in the hypochondria, more especially the right one. Pains in the back, loins, & extremities are rarely absent in this stage, & in most cases a general soreness is experienced throughout the whole body.
Towards the close of the third day of the stage of excitement, there is usually much giddiness & sensorial obtuseness present; the patient appearing even at this early period of the disease, as if under the influence of some narcotic. The cerebral functions now become more & more disturbed, hearing becomes obtuse, delirium more frequent and considerable, & the general torpor gradually increases. One of the most striking characteristic phenomena of typhus is the almost insurmountable aversion to corporeal & intellectual

exertion manifested throughout nearly the whole course of the disease. The patient moves slowly, & seemingly with great reluctance, & his answers to questions are hesitating, short & peevish. The stage of excitement generally continues about six or seven days before it terminates in the stage of collapse, though this sinking stage sometimes supervenes at a much earlier period, & occasionly comes on a few days later. The occurrence of a collapse is manifested by the subsidence of the previous inflammatory symptoms, & the supervention of great prostration, feebleness, & greater frequency of the pulse; a dry, brown, & eventually black tongue; teeth & prolabia incrusted with black sordes; a stunned, confused, & deranged state of the sensorial functions, with

more or less constant, low muttering delirium; total apathy & indifference to surrounding objects; generally great difficulty of hearing; subsultus tendinum, twitching of the muscles of the face, great difficulty of protruding the tongue, constant recumbence on the back, & gradual sliding down towards the foot of the bed from deficient muscular power; a peculiar biting heat of the skin called calor mordax, & finally, in violent cases, dark spots or blotches on the surface, a deep guttural or sepulchral voice, hiccough, & a tympanitic state of the abdomen. Tenderness of the abdomen to pressure, is one of the most common symptoms in the latter periods of typhus. During the collapse, the urine is rather copious, pale & often foams like beer when voided

into a vessel; there is generally also a manifest tendency to diarrhoea in the latter periods of this stage, the discharges being watery, acrid & highly offensive. Towards the termination of this stage, particularly when it tends to a fatal end, coma, more or less complete, is seldom absent, from which, however, the patient may usually be roused for a few moments. The period of collapse generally continues from seven to nine days, terminating either in slow convalescence or in death. The occurrence of convalescence is announced by the appearance of a gentle and uniform moisture on the skin, a reduction of the acrid heat of the surface, a moist tongue clean along the edges, more copious & sedimentous urine, abatement

of the delirium, & short intervals of repose, & in some instances moderate diarrhoea. In some cases these phenomena of a favourable crisis do not take place until the 17th or even the twenty-first day, but in the majority of instances they occur about the 13th or 14th day of the disease. The progress of convalescence is generally tedious, & the debility both of body & mind, after the total subsidence of the fever, is always very considerable. Such are the course & principal phenomena of simple typhus in its regular progress. Deviations & various irregularities do indeed frequently occur, even in the simple form of the disease, but they are seldom such as to efface the peculiar character or essential phenomena of the malady. Typhus, however, is subject to certain

prominent modifications, which, as they require corresponding changes in the mode of treatment, require particular notice. In some instances, the disease is early attended with internal visceral inflammation a complication which adds considerably to the rapidity & danger of the malady. The brain, the lungs, the mucous membrane of the alimentary canal, the liver, & the peritoneum, are the parts most apt to become inflamed in typhus; & of these parts, the brain & intestinal tube are most frequently the seat of the inflammation. Most commonly the phlegmasial symptoms do not supervene until the second or third day of the stage of <u>excitement</u>, though occasionally local affection manifests itself much earlier.

When the lungs are inflamed, the ordinary symptoms of pneumonia are superadded to those of typhus. Pain & cramps in the inferior extremities, or, pain along the course of the spine, with irregular & difficult respiration, & a peculiar uneasy feeling in the pit of the stomach, indicates the existence of spinal inflammation. The signs of enteric inflammation are often much more obscure. Tenderness & tension of the abdomen, an anxious & disturbed countenance; a very small, quick, & frequent pulse; constant recumbence on the back; much retching or vomiting; longing for cool drinks; a burning sensation in the pharynx; difficult deglutition & great prostration of strength, characterize this variety.

An
Inaugural Dissertation
On
"Pneumonia & Bronchitis"
Submitted to the examination of the
Provost, Regents, & Faculty of Physic,
of the
University of Maryland
for the
degree of Doctor of Medicine,
by
Thomas Ramsay Steele.
of Alexandria.
Virginia.

February 11th 1849.

To

E. W. Theobald M. D.

Prof. of Surgery in M. Med. Ins. —

The following imperfectly observed cases of disease, so prevalent among mankind, and involving an organ the integrity of which is so essential to the proper maintenance of health, are respectfully dedicated, as a small tribute of esteem for the untiring exertions which he, together with his colleagues, has made in advancing his pupils in Medical Science,

By his pupil

The Author

Capillary Bronchitis

Jan 17th 49 } Roger Coyle, act 40, an Irishman
10 am } Has been in this country twelve years, most of which time, he has been engaged on the Cumberland Railroad in the capacity of daily laborer – Was in the Infirmary last Spring with an attack of Pneumonia, since which period has enjoyed very good health. Is stout, rather fleshy, & apparently of good constitution with blue eyes, light hair, red face, and other marks of the sanguineous – temperament. Being, from the nature of his employment, very much exposed to the vicissitudes of the weather, he contracted on the 8th inst, a slight cold which didn't however incapacitate him from pursuing his usual vocation – till Saturday 13th – when finding himself too weak to – sustain any fatigue – he took to – bed, but without sending for any physician, as the nearest one, was five miles distant from his house, and he had no person whom he could send –

Nor did he take any medicine. His symptoms becoming aggravated; his cough more severe and attended with a copious, tenacious sputa, slightly tinged with blood. There being also considerable prostration he began to be alarmed, and concluded he would go to Baltimore, and put himself under medical treatment. He accordingly left Sykesville, his place of residence, on Thursday 17th, & came to the city in the cars, got the conductor to let him out at corner of Greene and Pratt streets, and with considerable fatigue walked to the Infirmary, where he entered this morning, and presents the following symptoms. "Has not lost much flesh. lies on his back, — mouth shut, flush on either cheek, more distinctly marked on Rt. an expression of anxiety on his countenance, eyes suffused. — temp. of surface warmer than natural. — no cephalalgia, but a sense of giddiness on assuming semi-erect posture, tongue moist and covered with a strata of yellow fur.

for its posterior 2/3, apex and edges red — pulse 130 full spirited strong. considerable dyspnea, respiration being 48 in the minute. cough severe, and accompanied with the expectoration of a copious, frothy, slightly rusty coloured sputa — complains of a sense of soreness over both lungs increased by a deep inspiration. bowels regular — passes his water with facility — phys. signs — On examining his chest, we find it doesn't expand with the usual ease and fullness — and upon percussion there is dullness at lower 1/3 of left lung posteriorly, as also at apex of each lung. with broncho, respiration & bronchophony — Auscultation reveals sibilant ronchus & fine crepitation over both lungs. also a little pleurisy at base of left lung. He was bled to amt. of ℥xxxij & put on Protocl. Hydrarg. grs ij — Tart. Ant. et potassii 1/6 gr. Opii pulv. 1/4 gr Every 3 hours — " — " — " — " —

The blood drawn is cupped, & slightly buffed — " — " — " — " —

Frid. Jan 19 } Didn't sleep very well
10 A.M. } last night in consequence of cough and dyspnea, looks bright however this morning, cheeks not so flush but more livid than yesterday, giving evidence of imperfect arterialization of his blood - temp. of surface warm - tongue moist and covered with yellowish brown fur - pulse 112 full and strong - respiration 48 - complains of pain along sternum very much aggravated by pressure. cough frequent, severe, & attended with a viscid, tenacious rusty colored sputa - Physical signs - percussion clear except at lower lft, & summit of each lung, where there is pneumonic hepatization - fine crepitant rale, quite distinct on both lungs - with sibilant ronchus at base, & also some friction sound - Dr Powers ordered him to be bled ℥xii - & cups between shoulders in case there

should be a rise of fever, Protoch
Hydrarg. & Tart. Ant. to be continued —
Sat 20th 9 A.M. The blood drawn yesterday was
cupped and buffed, & presented
a pretty firm clot — Our patient
looks much better this morning, & seems
more cheerful, says he feels better —
, Eyes brighter, cheeks slightly flushed
& livid, particularly Rt — tongue covered
with sordes — lips blue & dry — tongue
moist, & covered with a thin strata of
yellow fur — resp. 30 and easy —
pulse 90 — temp. of surface natural —
Cough not so severe, & expect. less viscid
but copious & slightly rusty —
Has not so much pain, but is weak
from the active treatment to which
he has been subjected — Phys. signs
remain unaltered — not quite so much
capillary rale — Ordered Cups —
between the shoulders — Protochloride
Hydrarg gr iij — Tart. Ant. et potas. gr ¼
Pulv Opii gr ⅓ Every 8 hours —

5 P.M. – Found him dozing, temperature of surface warm & moist, with some drops of perspiration on forehead – respiration about 25 and easy – pulse 80 full & soft – Has expectorated about ℥iv of frothy, tenacious, slightly rusty colored sputa – " – " –

Sunday 21st – Slept tolerably well last night – looks rather better – slight flush on either cheek – tongue moist & coved with a thin layer of yellowish fur, no headache, pulse 90, respiration 30 and easy – Cough frequent, & expectoration viscid, tenacious, & more rusty colored, – has no appetite – phys. signs same, treatment continued – " – " –

Mon Jan 22nd } Looks depressed, and is much
10 AM – } weaker – Slept very little in consequence of violence of his cough – Temperature of surface moist, and cooler than natural – Eyes dull & watery – faint flush on either cheek – Has no cephalalgia, but is stupid, & doesn't

seem disposed to answer questions, —
, tongue moist, tremulous, and covered with
a yellowish brown fur — lips dry —
teeth covered with sordes — pulse 90, &
natural — respiration 25 and easy — cough
not so severe, and attended with less viscid
rusty colored sputa — bowels more strong
night by salts — physical signs — the —
dullness at apex of right lung is —
still quite palpable, as also at base
½ of left lung — crepitant rales, but
so intense as yesterday — treatment
continued as heretofore — " " " " — "
Tues. 23rd } Says, he rested better last
10 AM. } night, than he has before
since he has been in the house —
, expression of countenance more cheerful
, complains of no pain, except a sense
of soreness on coughing, temp. of surface
warm, with a slight flush on either
cheek, more marked on Rt — tongue,
coved with a thin fur, pulse 80 full & strong
Resp 24. & easy, cough less frequent, & —

Expectoration diminished in quantity, & consistency - the rusty tinge having nearly disappeared - Phys. Signs, same, probably not so well marked as yesterday - There is a slight effusion into the Pleura at lower part of left lung - As salivation by mercury which he has been taken, ordered to leave it off, and take -
Pulv. Ipecac, et Opii, and Potassa Nitras.

Wed 24th } Found him taking his tea
9 a.m. } & toast, this morning, apparently with very much improved appetite, indeed, he says they don't give him half enough to eat - Bowels are quite regular - cough much easier, & expectoration, less profuse consisting of thin, transparent, frothy mucus - Pulse 80 & natural, respiration 24, & performed with ease - Phys. Signs - Pneumonic hepatization gradually disappearing, sub-crepitant rales not so extensive, nor so distinct as yesterday - Is still taking Nitras Potass, Pulv. Ipecacuanha et Opii - " " "

Thurs 25th 10. am; Did not enjoy a very good night's rest, But looks well this morning nevertheless – Expression of physiognomy – cheerful – temperature of surface natural, Has a faint flush on the cheek, which is not tinged of a livid hue as Pentoford, but of an arterial hue – tongue moist, & slightly furred – mouth & teeth sore from the effects of Mercury upon his system, so much so, as to render mastication very painful, pulse 80, full and soft – resp. 20 & natural – bowels slightly constipated – phys. signs – Has crepitans redux, at lower p of Rl lung —— Is taking Nitras potassa, & Dover's powder; Thid; 26th Appetite good, & eats heartily, & breakfast this morning for a sick man – bowels regular – cough very infrequent, & expectoration scanty —— Complains more of his mouth, than any thing else – pulse & resp, natural, has no headache, but experienced consid, dizziness on attempting to go to stool this morning

Sat 27th Find our patient quite lively this morning, & looking very much improved - says his appetite is excellent, only complaint he has to make, is, that the Sisters restrict him too rigidly - the temperature of surface moist, & natural - mouth & teeth sore, tongue covered with a thin layer of white fur - bowels constipated - cough, easy, & expectoration very much diminished, resp. 19, & natural - has no pain over chest; no headach nor dyspnoea - Phys. signs - Pneumonia clearing up, crepitans redux, at summit of each lung, & at low 1/3 of R/ - crepitant rales becoming fainter - Is still taking Dover's powders - " - " -

Mond. 28th 9 am Has rested well last two nights - feels perfectly well, is sufficiently strong to walk about room without experiencing much fatigue - appetite very good, bowels constipated, cough & expectoration almost entirely disappeared, tongue clean, teeth & mouth still little sore - pulse 80, full & soft resp. natural -

Phys. signs: dullness perceptible, crepitant rales at lower part of Rt lung quite manifest — crepitant rales not nigh so intense — " — " —

Jun 29. Found him smoking his pipe and conversing with his friend Michelly who is just convalescing from a pneumonia attack. Roger says he has no pain anywhere — mouth much better, appetite keen, & only difficulty is, can't gratify it — Has no dyspnea, nor headache — bowels reg — tongue clean &c —

Convalescent.

Roger lingers about the house for a week or so, after leaving his bed — his appetite & strength increasing rapidly, and his flesh fast filling up. He left the house perfectly restored to health, all evidence of disturbance about his lung having ceased.

Remarks. The foregoing case presented many points of decided interest to the physician. In the first place, we have here exhibited a confirmation of the law of greater liability to a second attack, when the patient has once before been the subject of the disease. This man was in the Infirmary last Spring with an attack of Pneumonia, & is now just convalescing from Capillary Bronchitis complicated with parenchymatous inflammation. Then we see the intense dyspnea, under which the patient labored, the livid aspect of his face, evidencing the imperfect arterialization of his blood in consequence of the diminished calibre of those vesicles & tubes, which conduct the air to the capillaries of the lung to effect those important changes in the circulating fluid, which are essential to its vivifying offices. The physical signs were very well marked. The fine crepitant rale could be distinctly heard over both lungs, thus rendering an incorrect diagnosis almost impossible to one, who could, at all, appreciate the auscultatory signs,

Pneumonia

Sept. 23rd 48 / 10 a.m. / John Flaherty, an Irishman — act 26, of intemperate habits, & by occupation a daily laborer — Has been in this country only two months, during which time, he has been employed at the Saw Mill on Fells point piling timber. Is of strong constitution, and very robust make, with as finely developed chest as one could desire to see — Says "he has always enjoyed Excellent health till present attack" — On Saturday 16th while engaged at his work, was exposed for some time to the rain, and thoroughly saturated with wet, On going home, he imprudently — neglected to change his clothing, and toward evening felt chilly, and had no appetite for his supper. On 17th. he awoke with violent headache, thirst, dyspnea, pain in back, loins & legs, and complete anorexia. Feeling too unwell to get up, he sent for a physician, who administered some purgative medicine, which acted freely upon his bowels. His symptoms, nevertheless, —

continuing to increase in severity, the headache and pains in his limbs not seeming to ameliorate any, and fearing he was about to have a serious attack, — concluded he would seek best medical advice, He accordingly entered Baltimore Infirmary this morning, and presents the following symptoms, decubitus on his back, eyes dull and heavy, temperature of surface natural, excepting extremities which are a little cold, cheeks slightly flushed some cephalalgia, intelligence clear, not much dyspnea, pulse 80 & natural, slight cough but no expectoration — The physician of the house thinking it a case of Remittent fever, ordered him to be put on quinine —

Sund 24th, Then being a rise of fever, ordered ℞ xv j and put on Protoch, Hydrarg

Mond 25th, 9 am, The blood drawn yesterday was slightly buffed and cupped, & of pretty firm consistence. Slept badly through night, says cough & sense of suffocation

would not let him rest, lies on his back with shoulders raised, & head slightly elevated, has well marked flush on either cheek, particularly distinct on Rt — no headache but a sense of fullness and tension about supra orbital region, temperature of surface much warmer than natural, tongue moist, and covered with a thin strata of yellowish fur, pr its posterior ⅔, apex & edges red & intelligent perfectly clear, mouth sore, and breath exhaling peculiar mercurial odour, — Evidencing the action of the remedy upon his system — pulse 96. full & strong resp. 28 & easy, cough dry, and attended with the expectoration of a scanty, tenacious rusty colored sputa. Complains of a sense of soreness, over Rt mammary region very much aggravated upon taking a deep inspiration, or upon being percussed & physs signs & upon examining his lungs we find increased vocal thrill, with complete dullness, bronchial respiration & bronchophony

over lower 2/3 of Rt lung anteriorly — puerile respiration at upper part of same lung, crepitant rales diffused over left lung, some slight rale at base of Rt, posteriorly, & in axilla — Has pleuritic stitch on Rt side — Ordered Tart. Ant. et Potash 1/4 gr every hour each dose to be taken in ℥j of gum arabic solution — to be bled if there be much rise of fever —

Tues 26th, 10 a.m. I had three stools through night from purgative medicine taken at bedtime, Did not rest well — Sweat profusely, complains of being very weak — temp. of surface moist & natural, excepting extremities which are a little cooler than natural, countenance depressed, flush on either cheek of purplish red hue about size of a dollar, no headache — tongue coated with a yellow fur & its posterior 2/3 edges red, & papillae projecting — pulse 100 full and strong, but compressible — resp. 30 more labored — cough frequent troublesome with expectoration of a rusty colored,

sputa, so tenacious as to be with difficulty got rid of from his mouth —
Soreness over chest still pretty severe. —
Physical signs remain the same — Order
Protochl. Hydrargri gr. j. Tart. Ant. et potassæ
gr. 1/4 every hour, diet mild & unstimulating
4. P.M. Temperature of surface warm, & forehead & cheeks covered with
drops of perspiration — says "he feels —
better" — no headache nor appetite, pulse
100 full and soft — respiration 30, & slightly
embarrassed, cough easier, & expectoration
not so copious —
Wed 27th 10 A.M. } Slept tolerably. Had two watery
stools through night — Complaining
of great prostration, but looks brighter
& is obviously improving — Has a flush
on either cheek — tongue is dry & covered
with a thin layer of whitish yellow fur
mouth not so sore, improving under use
of a stimulating gargle, pulse 80 —
resp. 24 and easy — Has no appetite.
Cough frequent — & has expectorated this morn

about ℥ij of viscid, tenacious, rusty colored
sputa, which adheres to the bottom of the
vessel, & hangs in strings when the vessel
is inverted. Physical signs, remain relatively
dullness is a shade less flat
than yesterday. Crepitant rales same.
Continue Ant, et Potass, tart. & Potash, Hydrarg:
Thurs 28th 10 a.m. } Didn't sleep well in consequence
of cough and thirst, but feels
better this morning nevertheless. had no
stool through night, no headache.
Pt. not so weak, & cough is much easier.
& Expectoration not so viscid & tenacious,
, appetite very much improved, ate hearty
of his breakfast this morning. faint
flush on either cheek, mouth not so sore
tongue moist, & coat with a thin white fur.
pulse 76 full & soft. respiration 20 & easy.
Physical signs. dullness not so palpable
& the bronchial respiration and bronchophony
not so intense, Crepitant rales over left
and part of Rt. very much diminished.
Ord. to leave off Mercury, but continue Ant. pot. & 2 hrs;

Frid 29th 10 A.M. } Had three stools through night, slept tolerably well – seems in very good spirits, & looks quite cheerful says he feels stronger, & his appetite is good, but they don't give him enough to eat, temperature of surface natural, tongue cleaning up – gums & teeth little sore, breath offensive, pulse 80 & natural, resp. 25 and easy, cough infrequent, & expectorate, scanty & very viscid – complains of no pain anywhere – Phys. signs – bronchial resp. & bronchophony very much diminished in intensity, Tart. Antimony & Malaria – continued – " –

Sat. 30th Decidedly better this morning, – talks of getting up, feels stronger, and appetite is excellent, no headache, temp of surface natural, mouth not so dry, tongue clean, bowels regular – pulse 80 & natural – resp. 20 & easy – cough very infrequent, & expectoration scant, & pretty very slightly tinged with blood, has no pain anywhere, limbs are a little sore from long –

confinement in the recumbent position
physical signs, the dullness, & bronchial resp. —
as also the bronchophony are not so distinct,
and I imagine I can hear something
like crepitant rales over upper part of
hepatized lobe — Crepitant rales disappearing
, treatment continued —
Mond Oct 2nd Found him sitting up in
bed very much improved in appearance
& in feelings. Slept well last two nights —
Has no headache, nor does he complain
of pain anywhere, appetite good, temp
of surface natural, tongue clean & moist —
bowels regular, pulse 76 & natural, resp. 18
& easy, cough & expectoration very much
diminished — {phys. signs} The hepatized lung
is slowly resuming its natural tone
& elasticity, & now emits a much clearer
sound upon percussion, the bronchial —
respiration, & bronchophony are gradually
fading, and the ear can no longer
appreciate the loud blowing sound
and bronchial voice so pathognomonic

of this disease.

falls into a state of stupor from which he is aroused with difficulty. His senses are no longer acute but dull, strabismus is not uncommon, the pupil from the size of one line in calibre becomes dilated to three and a half to four lines. There are no convulsions proper but subsultus tendinum. Countenance cadaverous and Hippocratic: cold & clammy perspiration, the sphincters relaxed, coma profound and life mounts the wing.

Now the treatment required for these diseases is somewhat the same in either or all. The principle remedial means are the abstraction of blood, purging, the application of rigorifics and the antiphlogistic system.

First – In regard to position the affected part should be elevated on a firm pillow and cold or iced water saturating linen, or powdered ice in a bladder or silk bag should be sedulously applied.

Venesection should be immediately resorted to and the blood should flow from a free orifice until some decided impression is observable: as soon after as possible though I have taken from fifteen to twenty ounces, at two bleedings in quick succession and then without delay had twenty-six taken from either nape removing a bag of ice from the head to accomplish the same and with the use of mercurial fumigations and Linimentum Ammoniae Comp. Fortior along

the Spine relieve this patient effectually.

Cups or leeches may be applied elsewhere as the case demands or the head may be shaved but the former on the temples of females or the latter to the same is frequently objected to: therefore circumstances direct. The Douch is very well.

Hard purging is imperatively demanded and there is sometimes great difficulty in producing a movement by any thing. I was once called in consultation in New York, to a case of a young lady on whom her two physicians could make no impression with neither injections ordinary and active such as senna, nux senna and ½ gr doses of Proto-Chloride. I advised a large injection of warm Chloride of Sodium and water and VIII gr doses of

submuriate of mercury uncombined to be given every hour until a free movement occurred; the second potion had the desired effect.

"Though it is customary to administer calomel in big doses with jalap xv grs and in three or four hours give senna salts & manna and after this three or four grains every four hours with an occasional dose of black draught, until the symptoms give ease. If the gums are affected so much the better: though care should be taken not to produce disagreeable ptyalism.

During the second stage the time for very active treatment has gone by however bloodletting may then be requisite

"Blisters are not often admissible

though sinapisms or fomentations of hot water are sometimes very sensible

Yet an active and quick bleister they emerge a patent fun course which might have been fatal.

The symptoms of collapse are to be vigilently watched as they are not always fatal but originate sometimes from nervous exhaustion Now stimuli and restoratives are in demand, as ammonia, beef tea, custard in solution with a few drops of brandy, Wine Sweet Spirits, and some anodyne such as hyoscyamus but not opium as some recommend. This hyoscyamus may be given by the mouth or XII grs of extract rubbed up with 1 ℥ of aqua thrown up with a small syringe.

And finally the patients general state should be carefully looked for, see that the bladder is not full and if so resort to a proper instrument, in the case alone alluded to the physicians had not attended to this organ, consequently I found it greatly distended and forthwith hung a female catheter with me I without any ceremony drew off a large quantity. These means being vigilently used with the antiphlogistic all though we must await the issue.

Medulla Oblongata — The functions of this have been greatly exalted by some writers supposing it to be the seat of sensation and volition but this is not tenable for the oblongata is but an organ

of the spinal cord having like functions with the exception of the occipital ~~that~~

The affections which then must be or at all events pathological states of the elongated are occasionally appreciable. I say the affections are not diagnosable but instances have occurred when after convulsions strabismus, slight convulsions frequent pulse yet no coma, an abscess was found occupying its diameter. Though there was disease of the mesenteric glands? It is sometimes softened and sometimes it is found dwindled to a mere cord.

Before I lay pen down I take up the spinal cord

As the several portions, as the cervical dorsal and lumbar,

of the cord are irritated inflammed or injured so we observe several interesting results to the viscera of the trisplanchnic cavity for instance above the phrenic and the upper intercostal respiration is instantly suspended and we have paraplegia if the injury takes place below the origin of the intercostals

Now Inflammations of the cord are nearly the same as those of the cerebral envelopes with which they are usually complicated

The Symptoms appear to be pains along the spine and extending into the limbs and simulating rheumatic pains

Inflammation of the substance of the cord, leads

to the same changes as are observed in the encephalon — a softening — inflammation and suppuration; and the symptoms are not uniform nor reliable.

The treatment of these states of the medulla consists in cupping, leeching, counter irritation and rigid adherence to one position.

I have now reached my limit; though I in starting anticipated a consideration of nearly all the ordinary nervous affections; yet — what I have remarked on mind over body and the latter on the former I believe of sufficient importance to have occupied thrice its limits.

Finally Gentlemen I commit these hasty pages

to your honorable care
hoping them and myself
a kind and charitable ac-
ceptance.

An Inaugural Dissertation De Cerebro, Medullâ Oblongatâ et Spinale.

Respectfully Submitted to the Examination of the Provost, Regents and Faculty of Medicine of the University of Maryland.

For the Degree of Doctor of Medicine

By Shipley Lester

Maryland March 10 1829

Prefactory Remarks

Gentlemen,

In introducing myself to your honorable notice according to the usages of graduation, permit me to give vent to my feelings by expressing my unfeigned attachment to Your noble profession, and a desire above all others connected with things of time, if perchance you deem me worthy of your suffrages, to make myself usefull to suffering humanity.

Quæ sanari potuerunt quæ cunque natione sanabo.

To whom alone your magnanimous avocation is designed, and to those with cultivators, in extending its olive-branch of kindness, charity and efficient aid, by day

and by night, at all times and under all circumstances, to the indigent as effectively as to the gay and wealthy, or even to the haughty monarch on the throne who cannot elicit more devotedness and kindness from the true Physician than the humble receives, of whom he anticipates no reward save a consciousness of having done what his finer feelings prompted him to, are ornaments to any community or country.

Pray! this profession — the noblest of the noble, in the language of Greece's favorite son, assimilates its votaries to the very Gods! and likens-unto the great and beneficent modern prophet who went about doing good!!

Homines ad deos nullâ re propius accedunt, quàm salutem hominibus dando.

Men resemble the gods in nothing so much as in doing good to their fellow Creatures.

And Homer in his inimitable Iliad B xi, has beautifully said—

A wise physician, skill'd our wounds to heal
Is more than armies to the public weal.

In essaying a thesis on the Brain and Nervous, it is evident that I have not chosen the simplest nor least interesting item of the nosology, but a subject that is now attracting the attention of medical philosophers, much more than at any former period.

Many of the most industrious and distinguished members of the medical profession, and a number of those occupying official stations and other advantages not to be gained in civil practice, are prosecuting inquiries with great zest, respecting the development, structure

and pathological states of the encephalon and nerves; with a view of determining their functions, and alleviating or remedying their diseases.

We may therefore reasonably anticipate, within a short period, valuable additions to the present views of the nervous system. We are encouraged in this belief from the valuable facts which have been made known and elucidated within a few years by the untiring efforts of Gulc. Reil, Spurzheim, Flourens S. C. Bell, Foville, Abercrombie, Rondiat, Mullen, Hall and Grainger etc who have cultivated this department of medical study.

These minute investigators
Errantes, pressinque oculos per cuncta ferentes
Exploring every place with curious eyes.
have not pursued the same
routine; some have had recourse
to nervous vivisection, others
have chiefly studied path-
ological condition and the
symtomatology thereof:
while others have vigilently
watched its origen and
expansion to maturity,
and marked the mani-
festations of function
at varying periods,- from
infancy's sportive weak-
ness to manhood's tower-
ing acumen and genius.
Hence in the short space
of a few years, we have been
possessed of more knowledge
concerning the nervous
system, or structure, than

had come down to us from all prior time.

The study of the rational brain yields in utility and dignity to none other however fascinating or comprehensive.

It is the investigation of the most essential part of our organization. It that portion for which all others of this beautiful palace that we inhabit, seem to be created. It is the ne plus ultra.

It is also of the highest philosophical interest from the indissoluble connection of brain and nerve with mental phenomena and things tangible.

The author is fully convinced that this system

performs a more important part part in the human or any other organization than is usually imagined, and that its control over the cause, continuation and subsidence of disease, has been too much permitted to pass unheeded.

This neglect I shall have occasion to revert to again in the sequel.

It is by this admirable system that all impressions either of the sublime lovely, joyous and benevolent; or on the contrary which too frequently blasting all, of the depressing, demoralizing and abhorent, are conveyed and experienced

I avail myself of this opportunity to recite an instance from Addison, which strikingly portrays those opposite states of mind and its influence over the body.

"This wild tragedy came off at St Christopher's one of the British Leward Islands. The negroes who were concerned in it were all the slaves of an English gentleman.

"This gentleman among his negroes had a young woman, who was looked upon as a most extraordinary beauty by those of her own ebony tint. He had at the same time two young fellows who were likewise negroes and slaves, remarkable for the comliness

of their persons and for the friendship which they bore. It unfortunately happened that both of them fell in love with the female negro in consideration, who would have been very glad to have taken either of them for her husband, provided they could agree between themselves which should be the man. But they were both so passionately in love with her, that ~~if~~ neither of them could think of giving her up to his rival; and at the same time were so true to one another, that neither that neither of them would think of gaining her without his friend's consent.

The torments of these two

lovers were the discourse of the family to which they belonged, who could not forbear observing the strange complications of passions which perplexed the hearts of the poor woolly heads, that often dropped expressions of the uneasiness they underwent all over in one spot, and how impossible it was for either of them ever to be happy.

After a long struggle between love and friendship, truth and jealousy, they one day took a walk together into a wood, carrying their mistress along with them; where after abundance of lamentations, they stabbed her to the heart's core, of which she

immediately died. A slave who was at his work not far from the place where this astonishing piece of cruelty was committed, hearing the shrieks of the dying person, ran to see what was the occasion of them. He here discovered the young woman lying dead upon the ground with the two negroes lying on each side of her, kissing the dead corpse, weeping over it, and beating their breasts in the utmost agonies of grief and loathing despair. He immediately ran to the English family with the news of what he had observed; who upon coming to the place, say the woman dead, and the two negroes

expiring by her with wounds they had given themselves.

"We see in this amazing instance of fidelity and barbarity, what strange disorders are bred in the minds of men when they loose their equilibrium and are not disciplined by reason.

"Though the action of this tragedy is cruel in the extreme and replete with guilt and horror, it proceeded from a temper of mind capable of noble fruits had it been informed and guided by a suitable education.

"The nerves are distributed to every part of the body — to every organ or viscus — to every muscle animal or organic, and to every fibre,

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endowing these parts with sensation, life and power, and with the ability of acting in unison and consummate harmony.

Considering the little diffusion of this system and its evident play in the economy of man; we should expect it to have a very material influence during disease, and that as intellectual standing and society advance, — the excitement of the feelings and passions, — all of which affect this part of the economy, increase, that an increase and more alarming state of nervous diseases and new affections of this system should be observed.

And this is most true for among the refined and cultivated are observed the very ultimatum of the neuroses.

Many distinguished scholars of all ages have fallen victims to studies and intense intellectual effort; and one of the latest that occurs to me was the distinguished scholar and statesman the Hon John Q. Adams whose useful and magnanimous career was cut asunder by an insentible providence, while at his accustomed post the most desirable and honorable place of all others to be called from this to that which lies beyond.

Body and Spirit or mind should never be treated seperately, for the mind depends for power as well upon the body as the latter upon the former for vitality and vigour: in earliest life the mental powers are feeble as the body; but when manhood steals on apace they reciprocally glow with energy and expand with controlling power, till at last the Chill blasts of age, make the limbs totter.

'Into the lean and slipped Pantaloon;'
and fancy's fires decaying into

—mere oblivion
Sans teeth, sans eyes, sans taste sans every thing.

"Dugal Stewart states that
"The laws of union between
the mind and body, and
the mental influence the
have the one over the other
are subjects of one of the
most important inquiries
that ever engaged the atten-
tion of mankind, and al-
most equally necessary
in the sciences of morals
and of medicine.

Now some metaphy-
sicians go so far as to say
that the mind which in com-
mon language is synonymous
with spirit, has no local
habitation, but is an anima
diffused through the
entire organization, without
a form, possessing an
immaterial individuality

and that to believe to the contrary would involve the assumption — most abhorrent to intelligence, — that man not to mention inferior animations, is not immortal.

Disce Carentem meagne pars vailetet. Senec

"Truth is to a great extent concealed from the blind and ignorant.

— Fortius ulterioris Dvill

Keeping a stiff rein I take it upon me to say that these wrangles about words and things above their brainless heads, are scarcely worth of a serious refutation. But inasmuch as we are contemplating mind and matter, or in other words of intelligence — sensibility and brain — and endeavoring to address

a cause for an effect — to give a habitation or vehicle for manifestations. That in their interesting phenomena controlled and pervade not only this well wrought frame by which we move and have our being — but our intercourse with man and men, and things the world over — from the most minute to the most stupendous: and especially as physicians we are most interested in a consideration of this most mysterious connection of mind with matter in controlling it in health and in disease — physiologically & pathologically.

In treating our subject we deem it proper to lay the axe to the root, or less allegorical to endeavour to have a foundation whereon to erect our superstructure however meager and untasteful its architecture

Therefore I shall make a few remarks, prior to entering upon the brain and medulla Spinalis as I propose, on the seat of intelligence — the whereabouts the immortal principle, which I hold synonymous with intelligence, resides, and what is known or presumable concerning its connection with the body

The ancients seated intelligence in the Heart, Liver,

Spleen, Veins, Arteries, Intestines, Diaphragm
Pectoribus inhians Spirantia consulit exta
Anxious the reeking entrails he consults.
Also the Pineal gland exclusively, and in short almost every other viscus or part of the body, till at last they sophistically reasoned it out of the entire body; like many moderns, especially of event-ful France—declaring that man is an automaton and death is the lasting slumber of annihilation,

But we conceive that, though the subject is undeniably obstruse—though matter cannot act where it is not present—and though the mind soars aloft and scans the world while its possessor sits in his study being but

a nest perched in an obscure corner of creation, yet! though memory's glow never never is hushed in slumber and life is one monotonous round of reciprocal action of mind on body and body on mind; we are not to abandon the subject as utterly inexplicable, and rank it with the acknowledged mysteries that finite never can sound.

But we should arise brushing off the dull and tame lethargy that manacles the brain, and open our eyes to things around us.

The object of this scene on such a subject, is simply

to investigate the facts, or relations of phenomena respecting the operations of mind itself, and the intercourse which it carries on with the things of the world around us.

This important rule in the philosophy of mind has been fully recognised only in modern times.

In entering upon this obstruse subject, I shall first define mind and matter with some desultory considerations.

Mind is that part of our being which thinks and wills, remembers and reasons: these I conceive constitute the real and in-

trinsic faculties of the internal senses; though many writers on the philosophy of mind, make a half score more and Rush in his "Diseases of the Mind" makes eighteen! including the principle of Faith, Will and the sense of Deity.

The mind can be compared to nothing in nature; it has been endowed by its Creator, with the ability of perceiving things external — Fecisti nos ad te: et inquietum est cor nostrum, no rest requiescat in te. :- hence investigators have ever found it difficult to define what they think they understand in relations to its faculties — some centailing, but the many ending in an immense ratio.

The term matter is a name which we apply to a certain combination of properties, or to certain substances which are more or less solid, extended and divisible and which are tangible only by these properties.

These latter are only known through the medium of the external senses.

It is most evident to the observant mind, that all our ideas — our intellectual part is solely dependant for its play, on the external senses — even all the fine ordinary which have their origin immediately from the brain, and the new or superadded sense Coenthesis

presiding to some extent over all, make man conversant with things around and above him; in a word what a blank is an infant just opening its eyes to sublimary things.

Locke, the contemporary of Newton successfully applied Lord Bacon's mode of investigation to the study of the human mind; and utterly rejecting the systems of the old philosophers, examined the soul by attending to its operations. From the simple fact that all knowledge is progressive, and that an infant gains its ideas gradually through the medium of its senses, he drew the general con-

clusion that there are no innate ideas in the mind, but that all are either immediate perceptions conveyed by the senses, or acts of the mind reflecting on those perceptions. This conclusion has been obstinately controverted; chiefly by drawing from it false conclusions or consequences, but it has never yet been shaken.

It is contended, as I stated heretofore that the mind cannot act where it is not present, and consequently it cannot be asserted that it perceives external objects themselves, but only their images, or sensible species

conveyed through the senses and represented to the sensorium in the same manner in which images are depicted in a Camera Obscura. By the internal functions of mind, these sensible species were then supposed to be refined into phantasms, the objects of memory and imagination; and these after a similar metamorphoses became intelligible species, the objects of pure intellect.

By a very natural application of this doctrine, it was maintained by Bishop Berkely and the philosophers of his school, that as the mind can perceive nothing

but its own impressions, we can derive no evidence from our senses of the existence of the external world; and Mr Hume extended the argument a little farther, by maintaining that we have as little proof of the existence of mind? and that nothing exists in the universe except impressions and ideas.

Some seceders from the same system, professed to believe (and if my memory serves me at this time or moment, for I have not the work at hand, Des Cartes was of this sociable and charitable sect.) his own existence, but could not admit as much

for any other being, hence they received the appropriate appelations of Egotists.

It is a singular fact as stated by Dr Reid, that nearly all philosophers from Plato to Mr Hume, agree in maintaining that the mind does not perceive external things themselves, but only their ideas, images or species

This dogma was founded upon the maxim, as I started this paragraph with, that mind cannot act where it is not present; thus ever encumbering the subject with the intolerable doctrine of materialism and

finding themselves in a labyrinth, they sweetingly say that the mind leaves the body and comes in collision with the objects of its perceptions, and then like our present philosophers of Hinboy returns in an aerial car or something else to its local habitation.

Such speculations however fascinating ought to be forever banished from the science of mind, as not only useless and profitless, but as connected with things entirely above the reach of finite faculties, and therefore contrary to the first principles of philosophic investigation.

'Ἥδεως δε ἀγαθῇ' – Laying aside false modesty –

"An envious creeping frost,
"That bites the first-born infants of the Spring."

We now "screw ourself up to the sticking point," and assert boldly that the mind – the soul – the immortal part of us, is an immaterial substance as we are conscious of being conscious of anything – Corpora non agunt nisi sint soluta aut fluida – Bodies act not unless they are disengaged or fluids! – That the mind soars aloft almost stepping into heaven, and the world over, obtaining here an idea and there a glowing impression, solely by a refere action on

things seen, heard, smelt, tasted, felt in a word things having a form and capable of retention, exclusively by association.

For how in the name of common sense can a man sit in a studious mood and roam into foreign lands never seen, or picture to himself some beautiful landscape, or again, resorting to nature's most sublime fact, whose unequalled and unique moulds of measured sentimentalism, have been forever broken.

"The poet's eye in fine frenzy rolling,
Doth glance from heaven to earth, from earth to heaven
And as imagination bodies forth,
The forms of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing,
A local habitation and a name."

I reiterate how can this be? if the mind is not connected as an immaterial to a material substance through the medium of adsveration and some other mysterious and inscrutable bond of union.

The former is entirely and almost unconditionally independent of the latter, for its continuous condition and integrity.

Though there are states of the physical economy when the mind seems to be or is thrown off its equilibrium.

In the most peaceful state of every corporeal function, and while blessings are strown with lavish hand all around

to make life desirable and sweet, passion, remorse or anguish may rage and smoulder within, or on the contrary while the body is racked and distorted by the most shocking and frightful diseases, the mind in and through both, may repose in delightful tranquility and lively hope: and as we read in Paradise Lost.

"The mind is its own place, and in itself
Can make a heaven of hell, a hell of heaven."

But in reply to the latter, that there are states that affect the mind, we quote the words of Dr N Emmott—
"Fever or a blow on the head will change the most gifted individual into a maniac, causing the

lips of virgin innocence, to utter the most revolting obscenity, and those of pure religion to speak the most horrible blasphemy, and most cases of madness can be traced to a peculiar state of the brain.

Hence that which we call mind or soul is, to the utmost extent of our knowledge, dissimilar to and distinct from every thing that we know to be a result of bodily organization, and we have no reason to believe that it should be affected by any change in the arrangement of material organs, except in so far as relates to its intercourse

with this external world.

However mutable the body, mind remains unchanged and though every part of the body is in a constant state of mutation, and within a certain a certain period every part of it is renewed: man feels that the being whom he calls himself remains unalterably and essentially the same.

In fine he remembers the occurrences of his early days and sees the inconsistency of the idea of an impression made upon a material organ, unless he has recourse to the absurdity of supposing that one series of particles, as they departed, transferred the picture to those which

came to occupy their room.

The effects of that change which we call death, are nothing more than a change in the arrangement of the constituent elements of the body, rendering it unfit for the full play of intellectual and animal life, — for it can be demonstrated on the strictest principles of chemistry, that not one particle of these elements ceases to exist.

There is therefore as Dr Brown has well remarked, in the very decay of the body, an analogy which would seem to mark and prove the continued existence of the thinking principle, since that

which we term decay is itself only another name for continued existence.

To convince that anything mental ceases after death, when we know that everything corporeal continues to exist, is a gratuitous assumption, and contrary to every rule of philosophical inquiry.

Thus this immaterial and mysterious part of our entity clothed in the habiliments of flesh and blood — connected by a bond which Heaven alone knows, shall indeed survive the wreck of its mortal tenement — which form the whole term of my reasoning

is found in all probability to be the Brain, for from it proceed and centre in, the organs of external senses, that by real images and association, bring into play the internal senses, thus connecting physical man with intellectual man.

I believe that I have now defined what I started out for — Mind and matter — what is known concerning the former — its intrinsic qualities and form and mode of action — its seat its immateriality and immortality.

Now I will attempt some remarks on the Sub-

ject proper of this thesis, which though full of interest, for want of time, for the first line herein was not written befor the 20 of February, owing to various reasons, as business and I must confess a remissness on my part. I cannot treat as I could wish, however such as I have, I advance relying on your charity and kind indulgence!

The most interesting of all the parts of man is the Brain — seated above to preside over all, first developed, and composed of the most delicate and sensitive tissue — the nervous — protected in a casket most adequate, capable of expanding when nature calls for more for the growing intellect, and consolidated and locked and wedged together together as to resist all ordinary violence. In fine the brain is so placed in juxtaposition as to command the external and general senses.

It would appear pedantic, not to say unskilled

for, to make any consid-
erable mention of the
anatomical structure of
the Brain, medulla elongata
and medulla spinalis,
in an essay of this character—
whether the hippocampus
major or the hippocampus
minor is in the middle
or posterior cornu. A deci-
sion pro or contra in regard to these or a number
of other similar parts can
effect the subject as I wish
to handle it: consequently
I shall make but slight
allusion to this department,
and what I do allude to
I take the liberty of believing
myself acquainted with,
and no servile copyist.

But my remarks
relate mostly to the functions

and diseases of the afore-
mentioned economy;
and inasmuch as they
are fraught with peculiar
difficulties I must of ne-
cessity examine them
in connection; then
physiologically and path-
ologically & the manner
in which I treat this im-
portant theme; and from the
cases adduced and ob-
servations made by myself
I shall endeavour to
draw general conclus-
ions.

The nervous system
is composed of the Cerebrum,
Cerebellum and Medulla
Oblongata, principally
supplying the organs of
sense and their appendages

with nerves, and of the medulla Spinalis with the nerves of volition, respiration, motion and sensation, directly connected or proceeding from it — This constitutes the cerebro-Spinal axis or centre.

There is a second System of nerves in the body, termed the grand or general Sympathetic, consisting of a series of ganglia lying along either side of the Spinal column from the Great ganglia — the encephalon, to the coccyx; and communicating freely with the cord and almost every nerve of the body and especially with those

of the various viscera; how this is a nerve or a system of nerves of organic life.

Sir Astley Cooper — one of the most useful and brilliant ornaments, the world or medicine has ever seen, states that — "If an injury happens to the head, the functions of volition and sensation are diminished; the stomach is disordered through the par vagum; and from the general communication between the grand sympathetic nerve and those of the brain and spinal marrow, the functions of the heart and the abdominal viscera become affected." The powers

of the mind are also dimi-
nished; memory is lost;
the judgement is enfeebled:
thus sensation, volition,
the involuntary actions and
the powers of the mind, are
diminished or suspen-
ded.

From this interesting
interpolation, it is evident
that the sympathetic with
its plexuses or plexi (for I all
confess I don't know which
word is correct) is most
intimately connected with
the entire tri splanchnic
cavity and well nigh
identified with the cerebro-
spinal economy.

The Brain is composed
of nervine, arteries, veins
nerves et lymphatics, with

its meninges — the former
medullary, by chemical an-
alysis consists of albumen,
adipose matter, colouring
matter, oxymyelone, lactic
acid and salts, and earthy
phosphates with a large
proportion of water.

"The structure of the
brain is principally fibrous,
with some granular matter,
as the cortical: the fibrous
is generally arranged side
by side as regards classes,
and frequently into fasciculi
and fasciæ, connected together
by a delicate cellular tissue
forming the bond of sup-
port to the entire organ.

"The brain is divisible into
cinerititious and medullary
substance, the former being

very vascular and receiving innumerable vessels from the pia mater, is supposed, the seat of intelligence, and the origin of nervous substance and nerves: whereas the latter the medullary or fibrous portion contains but small branches from the main branches of the base of the brain, formed by the vertebral and internal carotid arteries, and consists of diverging and converging fibres which Gall supposed he could actually trace quite out.

The medulla oblongata consists of similar columns as the medulla spinalis with the addition

of ganglia and bulbs of cinerious substance that may have a specific office; hence a description of the latter will suffice inasmuch as I am writing for Gentlemen and Scholars who are well acquainted with all that I allude to.

The spinal cord enveloped by the same membranes as the encephalon with the exception of the membrana dentata, consists of several fasciculi or columns, possessing varying powers acting in beautiful harmony and sending off their efferent, afferent, voluntary and involuntary nerves to every part of the body — to every

system or combinations of similar forms — to the minutest points of the economy; thus pervading, influencing and controlling all.

With these cerebro-spinal nerves the many external branches of the sympathetic throughout its entire length, anastamose, if I may be allowed such an expression in a case where there are no mouths, forming many beautiful plexuses in the three respective cavities, coalesing and running into one another so as to form an entire whole in close sympathy.

Now ending these preliminary remarks I shall proceed

to the task properly assigned to me.

Sir Astley Cooper remarks "If you omit to keep the mind free from agitations, your other means in the treatment of injuries of the brain, will be unavailing", and I may safely add if the intelligent principle is not duly ordered and calmed into hope and a lively anticipation, other remedial measures however potent will most frequently prove sadly unavailing in the many irritations, inflammations and affections that the encephalon and its tributaries are obnoxious to.

On this text volumes

might be written to advantage, but it is my limit, merely to mention some few instances where the effects of mental attention on bodily organs are most evident.

Concentrating the attention on a corporeal organ, augments the sensations derived from it, and effects more or less its actual state and functions. Many instances might be adduced in support of this; such as the Hypochondriac, the Dyspeptic, those labouring under Cardiac affections, and last mentioned though not last of the category, Gestation through all the states or stages, from the blowing of an ovum to the fully

formed foetus: these respective classes by fixing their consciousness with morbid intentness on certain organs create in them not merely disordered sensations but often perverted and disordered actions.

It is also true that nearly all local diseases, certainly all the neuroses may be aggravated and increased by such attention.

Who has not seen tumors, ulcers and exanthematous diseases, increased and perpetuated solely by mental abstraction?

It is my opinion that Asiatic Cholera commits its most alarming devastations through the imagination — through the mind, for

it is a well known fact, that the timid, irritable, and thoughtful of their own health, ever fearing death, fell victims to this sore epidemic, in vast numbers, and if not fatal victims they had some of the symptoms of Cholera, especially, griping tormina, flatulence, diarrhea and general nervous depression: while the resolute, thoughtless and active, fearing never until death itself stares in the face, but seldom succumbed to this fell destroyer.

It is usually reported though I have not had an opportunity of verifying for myself, that in prisons when all communication from without was prohibited

Cholera was not heard of, and did not prevail among the prisoners.

So strict is the seclusion says Mr Crawford in a report to a Secretary of State, in the Eastern Penitentiary of Philadelphia that I found on conversing with the prisoners that they were not aware of the existence of the Cholera which had but a few months before prevailed in Philadelphia.

To their ignorance of the existence of the Cholera may doubtless be ascribed in a great measure their preservation from this disease, not a single convict having been attacked by it during the whole period that it prevailed.

How often do we see the young and enterprising blasted in their most vigorous efforts, fine and wither away into a meager and shaken constitution, with pale countenance and despair marked on the forehead; utterly reckless of things once their delight?

How many a rising genius in medicine or any other literary pursuit, has been driven from once bright, hopeful and manly prospects, to drag out an intolerable life of disappointment and penury, whose dreary aspect has driven thousands to the abuse of the Coffee-house, the Club-room, the Theatre, the House for manly and intelligent-

games, and what invariably pervades all, the intoxicating draught.

The passions have a very great control over the body, either exhilerating or depressing.

Love which was implanted in the human breast for honorable purposes, sometimes becomes a disease, creating sighing, wakefulness, perpetual talking or taciturnity, or it may produce dyspepsia, hysteria, hypochondriasis fever and madness. The last has occasionally produced suicide.

I have known a number of females who have pined away and died from disappointment in their affections, when beside life

was most comfortable and equable: And I have repeatedly witnessed and examined a case of nymphomania in one of the hospitals of Baltimore, where the unfortunate victim - a young woman, acts the part of a disgusting and indecent idiot, foaming at the mouth from wild grimaces, and she most frequently places her hand where above all others a female woman ought not to place it!

I have observed in the Lunatic Asylum of Randall's Island - East River New York, a great many young females, though very few males, who I am informed by the resident Physicians, have succumbed

to their professions, some from elegant life, and who now present the dull and languid aspect of disease and hopeless delirium and wild insanity.

Grief has a depressing influence, sometimes causing insensibility, syncope, asphyxia and apoplexy, or fever, loss of memory, grey hairs, premature appearance, catalepsy and madness.

Dissections of persons who have died of grief, show congestion in and inflammation of the heart with rupture of its cavities. Grief often produces sleep; criminals we are told often sleep soundly the night-prior to executions.

The son of General Custine,

slept nine hours the night before he was led to the guillotine in Paris: and again the disciples slept while the Saviour prayed.

Fear was placed in man to guard him from evil — to protect him under many circumstances: but it sometimes becomes excited to morbid action producing tremors, frequent pulse et respiration, globus hystericus, pale micturition, diarrhea, aphonia, fever, convulsions, mania, epilepsy et death.

It has a remarkable influence over the hair, sometimes causing it to stand on an end as if on an insulated stool, or like the fretful

fourfin, or converting it suddenly into a gray and white and again a great "falling off": many instances of the effects of fear could be stated but the following being at hand I take the privilege of penning it.

A farmer of Pennsylvania named, as we read in a northern periodical, encountered a copper head serpent on a morning while working in his field, which he immediately destroyed without any injury to himself and as he supposed at the time; in the course of the morning he took up from the field his son's hat which had been thrown down with his own, in mistake though unobserved by himself: he

had not proceeded far towards the house before he felt uncommonly tight and by the time he reached the house his feelings were exalted to most alarming fears that he had been bitten by the aforesaid cocatrice; he in this dilemma and inquietude supposed that he had unobserved been fatally bitten, and accordingly he expanded more and more as he thought on the serious affair, the nest felt intolerably tight and the farmer swooned away in despair, sending for the whole staff of physicians of the neighborhood, who were quite as much perplexed as

the imaginary patient, and finding no apparent cause or wound to create such alarming symptoms, they retired in consultation. when among the rest of his family, his son came in to take an affectionate leave of his sire who on beholding him clad in his own large vest made of the same material as the one that would not fit his swollen body, he forthwith recollected himself and saw his mistake which being corrected left him free from all anxiety, with a grateful smile of astonishment at his consummate folly which might have proved fatal.

Anger has a marked influence over the body producing preternatural determination to the head, turgescence of the vessels of the face & eyes, increase of salivation, suppression of speech, subsultus, epistaxis &c

Joy is an emotion deservedly to be desired, but when exalted in some individuals it produces pain in the precordia. There are instances of death being produced by excess in joy. The son of the famous Leibnitz died from this cause, upon his opening an old chest, and unexpectedly finding in it a large quantity of Gold. Pope Leo died

of excess in joy upon hearing of a great calamity that had befallen the French nation. And it is well known, the door keeper of Congress, died of apoplexy from joy on hearing the intelligence of the capture of Lord Cornwallis and his army. Army the was that made us a free and happy nation.

In fine, the mind has a most decided influence over the body and especially when disease supervenes upon its inquietude.

But on the other hand there are states of such intense abstraction, that the body seems perfectly sheilded from all ordinary

exciting causes of disease. How many inmates of Lunatic Asylums, go unharmed after the greatest and repeated exposure?

But again if mental attention causes some bodily affections, may it not cure some? Will it not be acknowledged that the contemptible absurdities of Astrology, of Superstition, of Charms and mysterious nothings in the form of amulets, of bags, of abracadabras and every thing else that the old ladies conger up, do good in emancipating the patient from despair to healthful hope, and this sometimes after the whole armament of the materia medica, has proved

unmanail, or been abused which I suspect is too frequently the case.

Mr Hunter if I mistake not. directed a patient who had paralysis of one of his lower extremities and wholly unable to bend the knee, to be placed on a table, with the lower limb hanging over it, and to will to move the member. At first no motion could be produced but after repeated attempts the will seemed to gain power and by its exertion alone the limb could be moved.

The influence of the mind — of mental manifestation in causing and curing disease, is altogether too much disregarded in medicine.

Now I take the opposite of the question, id est, the influence of matter on mind or brain et seq.

There are a thousand varying states of things around and within our own tenement, that affect the mind — a determination of blood to the head not caused by emotion — not a reflex action — meningitis, phrenitis, tumors, inflammations, ramolissement, effusions into ventricles, compression — all, all influence the mind to an exalted extent and too frequently cause death.

Various states of nearly all the viscera acting on the medulla spinalis and thence to the brain, are the

fruitful causes of many nervous diseases that flesh is heir to.

Who has not felt the enlivening effects of alcoholic beverages, acting primarily on the brain, disposing to mental effort, to loquaciousness, or elevating the despondent to pleasant forgetfulness of past ills.

Music has a thrilling effect on the mind.

— like the sweet south
That breaths upon a bank of violets,
Stealing and giving odour.

Music has a most salutary effect on the sick either of mind or body; Luther often calmed his depressed spirits with his flute, and he declared it to be one of his greatest comforts.

In all well regulated hospitals for the reception of the melancholic and insane, music forms one of the principle remedial means, in fact it is second in importance, for while the douche the shower or the ordinary bath gently constrains to obedience, this soothes them out of all their pain troubles and engages the listening ear to its sweet tones.

It seems an especial blessing designed by high Heaven for the blind, for while shut out from things seen they pass seemingly happy many hours that would otherwise hang as a burden over them: and I think some of the most melodious, I have ever listened to, was from this class

"By the sweet power of music: therefore the poet
Did feign that Orpheus drew trees, stones and floods;
Since nought so stockish, hard and full of rage
But music for the time doth change his nature.
The man that hath no music in himself,
Nor is not moved with concord of sweet sounds,
Is fit for treasons, stratagems, and spoils;
The motions of his spirit are dull as night,
And his affections dark as Erebus:
Let no such man be trusted."

Last on this head — the varying states of the atmosphere have a decided influence over the brain — the clear and salubrious exhilarate and make cheerful and happy — the lowering and humid depress all around, hence the flow of kindred spirits in the country while the pent-up in towns and especially very large cities are apt —

to be morose, indolent and nervous, especially if the mind is already acting injuriously on the body.

The striking cause of the difference in gaiety and vivacity with full flow of spirits, between Parisians and Londoners, is the extension of promenades, gardens institutes and boulevards of the former, which are almost continually thronged with pedestrians and others in quest of amusement; while the latter are pent up in the smoky streets of dense London having no room for anything but shops and warehouses.

This is bad policy and our own city has imitated too much this example.

Philadelphia & New York are far our superiors in this respect, and often have I in walking in the cool of the afternoon, through their respective parks and squares amused at the many promenaders, many of whom it is true are of the lowest walks in life, but for whom principally they are most needed, yet these squares are ample enough for all to enjoy the pure air of kind Heaven, unmolested, and here are children by hundreds in sportive play — the best physic for them!!

I protest I have often while thus walking, sadly lamented the want in Baltimore and even now parks ought to be formed in the very center of

the city in defiance of citizens.

Mr Burke in pleading for English Parks which the citizens of the day proposed to transfer to some temporary convenience or miserly policy, very wisely called them "The Lungs of the city"

Thus the unnatural states of the atmosphere depress the nervous system and inflame the entire organization; how frequently has the student of this palace we inhabit - gone to his quarters depressed in spirit and wholly unable to accomplish his desires concerning his studies until exhausted nature is resuscitated by the embrace of dulce sleep.

The depressing influence of a vitiated atmosphere is well exhibited in the case of the lamented Fulton.

I believe not knowing the exact diagnosis of his physicians one of whom was his honored teacher, and an ornament to the medical profession, that the dissecting room proved his untimely death, for well do I remember the assiduity and unwearying zeal with which he manipulated his last subject — on these remains, alone interesting to the physician, he lingered for some two or three weeks not willing to yield to the weakness of his already depressed constitution

And when he remarked

with his accustomed smile
ever brightening his brow,
and with book and dissec-
ting case under his arm,
to me while standing at the
door of the Preperation room
"well Lester I have got through
my subject at last and
I don't feel so well as I
would wish, little did I
think that he was destined
in the short space of about
one week, to fall through
young as he, with the rapi-
ters of medical study and
fame, not only as a most
promising young gentleman
but a studious anatomist
and aspirant for medical
knowledge of which he
possessed a very respectable
share.

Long will the memory

of Robert Fulton he cherished by many who knew him in the halls of the university, and I know that many will acquiesce with me in wishing his immortal part joy and felicity forevermore in elysian bowers with nature's God, the study through which, to whom cut him untimely asunder and numbered him with the dead!

I shall now close what little I can write, for want of time and paper with some of the most prominent affections of my subject.

On the various traumatic lesions of the brain and its envelopes membranous or osseous

frequently elucidating many interesting physiological facts I must needs pass over in silence inasmuch as it is now beyond the eleventh hour with me.

Therefore I take up the physician's proven and common ailments.

Inflammation of the Dura Mater or this and the arachnoid.

"This very rarely happens as an idiopathic disease, but is usually the result of injury.

"The symptoms are pain in the head, restlessness, sleeplessness eyes painful, vigorous, nausea & vomiting and lately delirium convulsions or coma supervene.

Inflammation of the Dura Mater sometimes occurs in

connection with otitis or otorrhea

This disease generally occurs in irregular circumscribed patches of greater or less size and many beautiful arborescent lines are observed and the inner surface is covered with small masses of lymph

Arachnitis is a rare affection and I doubt if it is ever diagnosed unconnected with the other meninges Its symptoms are all nearly the same as the form

But Inflammations of the Pia Mater is of frequent occurrence though often combined

This is ushered in by no uniform symptoms but the most common is long continued general convulsions, the convulsions recur and at-

length and in coma. Again it commences sometimes with hemicrania cinesis et lacrimy: and considering the intimate juxtaposition of this tunic and the gray matter the seat of mental manifestation, delirium often violent and continued is stated by most writers to accompany and indicate inflammation of the membranes and especially those in immediate contact with the substance of the brain.

The appearances after death are conspicuous vessels filled with florid blood. Sanguineous effusions are often seen presenting ecchymoses in some parts. Sometimes there is an effusion of pus on the entire surface and occasionally cand-

ing ulceration down to the cerebral substance proper, by its acrid character: however this is rare. Tubercles are sometimes found in the lungs of the fire mole causing great irritation.

Phrenitis general inflammation of the brain and its membranes presents two distinct periods marked by peculiar symptoms. In the first the period of excitement we have pain of the head, deeply seated and extending over a large portion of it, a sense of constriction, throbbing of the temporals, wild and brilliant aspect, contracted pupils, preternatural sensibility to external things restlessness, violent delirium

paroxysms of General convulsion, forehead & dry skin, frequent & hard pulse, furred white tongue, thirst nausea and constipation. These symptoms are not found in every case but the affection may be ushered in in three or four different modes. Andral says that he has observed a few striking instances of inflammation of the brain where the first sign was the sudden supervention of aphonia.

These signs continue for ten or fourteen hours or 3 days and are succeeded by others indicating the second stage.

The Period of Collapse. These are the result of the accidents of inflammation in all probability. The patient now

Remittent fever, which, from the hepatic complications with which it is attended has been called bilious remittent and bilious fever, is a disease which occurs more or less throughout all parts of the United States and is endemic in the marshy districts of all hot climates during the summer and autumnal months. Remittent fever is intermediate between intermittent and continued fever, it is subject to exacerbations and remissions. The onset of the disease is sometimes preceded for a day or two by slight headache, nausea, bitter taste in the mouth, furred tongue, languor and a general feeling of discomfort. The formal commencement of the disease, is nearly always ushered in by a slight chill, which continues for an hour or two, when it is succeeded by an increased temperature of the

whole surface, dry and contracted skin, flushed face, suffused eyes, pain in the head back and limbs, pain and oppression at the epigastrium, a sense of fulness at the hypochondria, furred tongue with red tip and edges, nausea and vomiting, the matter vomited being of a greenish or yellow colour, great thirst, an accelerated pulse, seldom hard, costive bowels generally urine small in quantity and high coloured and great restlessness and watchfulness There appears after some days a yellow tinge of the skin, which extends to the conjunctiva of the eye. The exacerbation continues from eight to twelve hours, when a remission takes place, at which time a slight perspiration sometimes breaks out over the body and the patient falls into a refreshing sleep, but oftener the skin continues dry and the patient restless during the remission. The remission continues for a longer or shorter time according to the severity of the case

The heat again gradually increases, and an exacerbation takes place marked with the same degree of intensity or increased severity. Such are the phenomena of the simple form of remittent fever. The inflamatory form is marked by the same symptoms, but in an aggravated degree. The exacerbations are long continued and the remissions less distinct. The pulse is quick frequent and hard, the skin very hot and dry, the pain in the head back and extremities very severe. The weight and oppression at the epigastrium almost insupportable, and the nausea and vomiting very distressing (the matter vomited being of a green or yellow colour) An aversion from light and sound and frequently delerium is present. The bowels are generally costive and when they discharge with tenesmus and griping. The difficulties when

procured by the agency of medicine are dark coloured tenacious and offensive. In the course of the disease, the skin assumes a greenish yellow colour. Unless the intensity of the disease be diminished by appropriate treatment the exacerbations continue to increase in severity. The skin becoming cold and covered with a cold clammy perspiration, the pulse becoming more frequent and weak, and ultimately death closes the scene. But it is not so in the simple form of remittent fever, nor in the severer form when timely and vigorously treated. We then find the pulse becoming slower and less frequent and the skin to grow cooler, and the pain in the head back and extremities begins to abate. The paroxysm is shorter and as it declines the skin become softer and more moist. The remissions become more distinct and finally an intermission

takes place, and convalescence follows. In the simple form of remittent there takes place an exacerbation followed by a remission once in every twenty four hours, but in the inflamatory form the remissions are sometimes so slight that they can scarcely be perceived. Its type is generally that of the double tertian, in which there occurs a paroxysm and remission every day, but the paroxism of one day differs from that of the next and of the preceding day in severity or other circumstances. The usual duration of the disease is from nine to fifteen days, but the patient may get well in a few days or the disease may run on for several weeks. It is not uncommon to see cases protracted beyond the tenth or twelfth day and assuming what has been called the typhoid stage of bilious fever. Here the periodicity

which characterises the disease is almost destroyed. The pulse is small and charged. The tongue through off its fur and smooth red and dry or covered over like the teeth and lips with foul sordes, the stomach loses its irritability and the vomitings cease, the stools are dark, and meteorism occasionally shows itself. There is muttering delerium or a disposition to heavy stupor or coma, the countenance is dull, there is subsultus tendinum, and great prostration of strength. Such cases continue sometimes for several weeks, their average duration however is about fifteen or twenty days. The pathological lesions are various. The indications of disease are said to be detected oftener in the stomach and liver than in any other organs. The stomach in a large majority of instances is found injected, with increased redness and sometimes thickening and soft

ening of the membrane. The liver is generally found flabby and of a bony colour. The lesions of the liver are considered to constitute the anatomical characteristics of the disease. The spleen is almost always enlarged and dark coloured. The mucous follicles, called the glands of Brunner, of the duodenum have been found enlarged. The glands of Peyer are commonly found free from any well marked morbid alteration but in protracted cases they have been found diseased. The brain and lungs are very often found congested and presenting indications of inflammation, but these lesions are considered to be only accidental complications

Congestive remittent fever may be fully developed from the commencement, at other times and this is more commonly the case

the first paroxysm does not differ very essentially from that of simple remittent fever. There is one main peculiarity, which is an expression of dread on the part of experiencing it. When the congestive form of bilious fever attacks suddenly it is apt to assume a peculiarly malignant form and to end speedily in death. The skin is cold and covered with a cold clammy sweat. The pulse is generally weak and fluttering. Great irritability of stomach is present with frequent painful and usually ineffectual efforts to vomit. The countenance shrunken and pale. There is sometimes low muttering delirium. The patient in rare cases does not complain at all but at other times we see the most severe suffering experienced by the patient, who often utters groans and loud cries: Reaction takes place very slowly if at all. The remissions of bilious fever are

usually well defined and full of transient relief and hope. The return of the third fourth or fifth paroxysm generally carries off the the patient. It is probable that the morbific causes by which the disease is produced, act primarily upon the nervous centre and depress the energy of its action, giving rise in that way to all the other phenomena which characterise congestive fever. It has been doubted by some whether or not these cases of congestive disease ought with propriety be called remittent fever, when they frequently run their course without exhibiting the slightest indication of febrile reaction, they are however produced by the same causes, and when the congestion is early removed, they assume all the characteristics and run the same course that simple bilious fever does, showing that these phenomena were only masked by the congestion that was present. Relapses are very

liable to take place from imprudence in diet and too early exposure. It seems that, when once the malarious poison has been received into the system, ~~although~~ occasional causes may produce the disease long afterwards. Various chronic alterations of the liver and spleen are frequently the consequence of remittent fever when long continued or often repeated. The liver and spleen become enlarged indurated or both, and in many instances changed in their intimate structure. When these become inveterate and extensive the patient gradually becomes weak. Dropsical accumulations come on or diarrhea or dysentery sets in, the constitution is broken down and finally death takes place. The functions of the stomach and alimentary are for a long time impaired after chills and requires prudence on the part of the patient to restore them completely. After a severe attack

the patient sometimes his hair, which is slowly replaced again if at all. The diagnosis in remittent fever is commonly easy, though sometimes it is difficult in the highly inflamatory form and in protracted cases, nevertheless by a careful study of the previous history of these cases and the circumstances by they are attended, we will generally be able to establish a ~~complete~~ pretty certain diagnosis. During the first week or two of the disease its remittent character is generally so decided as to leave but little doubt of its true nature. In the majority of cases too, the condition of the patient will be different from that of one having typhoid fever. There will be no ~~[illegible]~~ eruption. Very rarely will the low muttering continuous delirium with the subsultus tendinum and picking at imaginary objects be so well marked. The prognosis in congestive fever is always very grave. By judicious treatment early commenced with the

milder forms of the disease, with distinct exacerbations and remission, in which no tendency to disease of the more important organs, is shown, we may generally succeed in bringing the disease to a favourable termination, particularly where they occur in persons whose constitutions have not been broken down and who are not of undue plethora. When vigorously treated from the commencement even the strongly marked inflamatory form seldom terminates fatally. Mild and short exacerbations, distinct remission lasting long and accompanied with free perspirations, sleep during the remissions, the pulse becoming slower and less frequent, the discharges becoming more regular and healthy, and the postponement of the exacerbations beyond the regular time, are favourable symptoms when they show themselves in remittent fever.

The most common cause of remittent fever is a poison eliminated from the surface

of the earth, in the production of which heat and moisture combined seem to be the two essential requisites. Animal and vegetable decomposition have been ranked among the producing causes of the disease. Any of the occasional causes may bring on remittent fever in one whose system is predisposed to the disease. Great heat seems to be a predisposing cause. General bloodletting should be had recourse to when the patient is seen early in the disease, (before the fourth day) and the patient is of a plethoric habit, and the disease is attended with great arterial excitement and severe pain in the head, and the skin is hot and dry. But later in the disease we must be very cautious in the use of the lancet. Local bloodletting is applicable at any period the disease, when it is not contraindicated by the condition of the patient. In cases attended with pain in the head, distress at the epigastrium, pain in the back or in the hypochondria, local bloodletting may

be used along with general bloodletting when that is considered advisable, and alone when general bloodletting is not advisable.

Purgatives are almost always use in remittent fever and seldom without much benefit being derived from their use.

Calomel and blue-mass are the medicines generally prefered on account of their supposed peculiar action on the liver, and for their efficacy in removing or correcting arrested and depraved secretion.

Purgation should not however be carried to excess. As a general rule two or three consistent stools in the day, will be sufficient, during the active period of the disease, and later one or two will be sufficient.

If there is internal irritation only the mildest laxatives should be used. The great antiperiodic, cinchona (or some of its preparations) should be used, during the intervals to prevent the return of the paroxysm, quinine is used almost exclusively for that purpose. The period

of remission is the most appropriate for the administration of that remedy. But should the periodicity of the disease not be well developed we must not refrain from the use of quinine on that account, for experience has shown that the administration of quinine, in large doses, in such cases, is not followed by any aggravation of the febrile excitement, but it is said to have rather a sedative effect. Refrigerants are among the most valuable of our remedies and should be resorted to in all cases of high excitement, when the skin is universally hot and dry and prove agreeable to the patient. They should be avoided when any indication of inflammation within the thorax is present and when there is diarrhœa. Diaphoretics, such as nitrate of potash and small doses of ipecacuanha have been much recommended but are now not much used. Acid drinks acidulated or not should be

be freely used when desired by the patient, which generally prove the best diaphoretics we can give. There is a great degree of irritability in some cases of bilious fever, this symptom may very often be removed by bleeding for the arm when the pressure, or by cups or a blister over the epigastrium Small portions of ice held in the mouth will often afford relief. Small doses of calomel from third to half a grain suspended in some simple mucilage have bee recommended. 25 grain of acetate lead dissolved in a small quantity of water given every hour or two, it tried to have removed the irritability of the stomach, when every other remedy had failed. The patients room should be kept clean and cool and without light, No food should be allowed to be taken by the patient untill the disease has been subdued, and then only rice water or

gruel in moderation. When the remittent runs on to the typhoid stage, we can only try to keep up the patient's strength and remove or relieve any symptom of great distress or danger that may occur. If diarrhœa be present it must be treated by opiates and astringent injections. During convolescence the patient should be kept from exposure and fatigue, He should be very cautious in his diet, which should be of the most easily digested food, and he must resume his customary diet, by degrees. In the treatment of congestive fever, during the chill we must endeavor to bring on reaction For this purpose the application of heat to the surface and internal and external stimulants are generally relied. The warm bath is resorted to, or bags of hot sand or salt or bottles filled with hot water are applied to the extremities and sinapism to the abdomen. Internal stimulants may be used sometimes with great advantage. Quinine must be given

freely, either alone or in combination with other medicines according to the nature of the nature of the case.

General bloodletting has been recommended in congestive bilious fever, and great benefit is said to have been derived from its use, but great caution is necessary in the use of the lancet, the finger should be kept upon the pulse and if it be found to sink or not to become developed after the loss of a quantity of blood, the blood should be stopped immediately. Sometimes when the vein is first opened only a few drops of blood will be found to escape but after a while the blood will flow in a full stream with great relief to the patient.

An Inaugural Dissertation

On Inflammation

Submitted to the Examination

of the

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for the

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By

Basil Norris

of Frederick Town

Maryland

Inflammation

As many scientific, and most medical terms, have been derived from a real or imaginary resemblance to something previously existing and familiar, so the subject of our thesis, seems to have suggested to the founders of medical science, and framers of much of its nomenclature, the comparison to combustion or flame, either from the sensation or aspect of the part affected, hence its etymolog. from inflammo and phlegmon. It has been defined to be a condition of parts, having a tendency to morbid secretion, and alteration of structure with increased vascularity and sensibility, but no definition has been found sufficiently comprehensive to embrace all the varieties and apply to the diversified phases of this disease. The local symptoms characterizing it, have been universally acknowledged from the earliest ages to consist of redness, pain, heat, & swelling

all of which, vary according to their location, and are modified by the diathesis of the individual in whom it may appear. Thus: in persons congenitally predisposed to scrofulous diseases, the inflammation will differ materially from that occurring in a man of robust habit and sound constitution. Before proceeding further, we deem it expedient to notice briefly the condition of the blood-vessels, previous to, & immediately preceeding the inflammatory attack. Observers seem with unanimous consent, to have selected the unfortunate frog, as the subject of their investigations, in the web of whose foot are most satisfactorily seen, the interesting and beautiful phenomena, which have contributed so much to enlighten the professional mind, upon a subject exceedingly obscure. Intervening between the arteries and veins, is the capillary system of vessels, which are of uniform size, promiscuously anastamosing with each other, at different angles and presenting an appearance, very similar to the meshes

of a net, Now should the web of the frogs foot, in which they abundantly exist, be irritated by a pin or stimulating liquid, in obedience to the law. "ubi irritatio ibi afflux" an increased quantity of blood is seen by the microscope to be determined to the part, from which its capillaries become distended, and endeavouring to adapt themselves to the duty they are called on to perform, strongly contract upon their contents & force the blood with greater rapidity through their tubes, [which may be seen unaltered in the veins], but after the lapse of a short period, which is termed incubation, the healthy secretion of the tissue becomes suspended and the tone of the vessel having been exhausted it gradually yields to pressure, and dilates at a single point from which it diverges & becomes diffused according to the severity of the attack. Such is congestion, the constant harbinger of inflammation, but another phenomenon is now observed in the dilated tubes, the globules are seen sluggishly moving, and occasionally adhering to the sides of the vessel, from which they are detached by others in

in the current, until finally the circulation becomes so tardy as to be unable to effect their removal, whilst others accumulating around the nucleus, form points of stagnation, then it is that phlegmasia has commenced.

Local symptoms. Redness - is a constant symptom of inflammation, & consequent upon an undue quantity of blood in the vessels of the inflamed structure, which becoming engorged by the influx, gradually lose their tone and dilating increase in calibre to admit red particles in greater abundance, new tubes are also formed for their reception, a work which is accomplished with surprising rapidity and productive of great vascularity in parts, which during health are but meagerly supplied, John Hunter, the pride of our profession, and to whom it is indebted for most of its knowledge on this subject, demonstrated the enlargement of the capillaries, by producing inflammation in one ear of a rabbit & injecting both from the aorta, thus, allowing an equal quantity to be sent to each, in this manner he found the vessels of the inflamed ear, to have been increased in diameter 1/3 beyond those of the sound ear, That globules are received into vessels which

did not in a healthy condition admit them, is manifest from the appearance of an inflamed eye, for in ophthalmia the transparency of the conjunctival portion of the globe is entirely obscured by the circulation of red blood, where in health it cannot be detected by the microscope, redness is subject to great variety in shade, being sometimes of a bright scarlet colour, as seen in acute inflammation and during its earlier stages, again it is of a purple hue, as in the chronic forms, and possessing a deep lurid tint where a tendency to gangrene manifests itself. It also varies according to the type in which it may exist, being widely diffused in erisipelatous inflammation & circumscribed in some specific forms. its presence is not an infallible sign, as it may be caused after death, by the action of the capillary vessels, which do not cease to contract, after the heart has failed to perform its functions. but continue to empty the arteries & produce engorgement of the viscera, particularly the thoracic & splanchnic, being most usually observed in the lungs & spleen, The blood also gravitates to the most dependent situations & red blotches frequently result from

the effusion of hematin through the coats of the vessels in incipient putrefaction; temporary redness may be produced to an eminent degree, independent of inflammation by mental or moral emotions, causing a transient suffusion of the cheek, and great determination be made to the surface by violent exercise. Heat is most remarkable in parts remotely situated from the heart & possessing the least temperature during health in inflammation of tissues adjacent to the centre of the circulation the increase is scarcely perceptible. It was supposed by Hunter to be solely dependent upon the natural warmth, existing in the augmented quantity of blood and many experiments were instituted for the purpose of corroborating his supposition, he inflicted a wound upon a dogs chest, & found the temperature remaining nearly the same after, as before the inflammation had been established, also in the gluteal muscles of an ass, & many other parts of the body, in which the increase was ascertained to be proportionate, with the distance from the heart, after an operation for hydrocele a thermometer was applied close to the side of the testicle, the mercury

standing at 92°, after the tunica vaginalis had become inflamed, it arose 63½° in the scale which however did not exceed the healthy standard of blood-heat. But says Mr Travers, who did not consider the test a just criterion, "the nerves measure the sensation, rather than the degree of heat, furnishing a very different scale from that of Farenheit & Reaumer", and to prove the difficulty of estimating the temperature in that way he adds, the determination of blood to the capillaries producing the phenomenon of blushing, is attended by a distinct & burning sensation, of heat to the individual, yet not such as could be detected by the most delicate thermometer. The most plausible manner of accounting for it, is by Liebig's theory of calorification & the one adduced by himself as affording a reason for the preternatural warmth, in inflamed structures according to him the generation of heat is effected in the capillary system by an action between the oxygen of arterial blood & the elements of the tissues - carbon & hydrogen - causing combustion in fine, & consequently the evolution of caloric, which is therefore a necessary accompaniment of

inflammation, though it may exist unobserved, not being always of sufficient intensity to attract the attention of the individual. Pain is generally refered to tension exerted upon the nerves of the part by its engorged vessels, expansion also of the surrounding tissue & dilatation of the vessels themselves contribute much to the same result, as proved by the modification it undergoes from its location, occurring in the osseous system which is almost devoid of sensibility in a state of health, we find the pain excruciating from its incapacity of yielding to the pressure of the distended vessels. in mucous membranes & parenchymatous tissues, possessing great elasticity & capable of enormous distension, it is sometimes scarcely perceptible giving the patient merely a sensation of soreness or uneasiness, Its character is known so generally to be modified by its seat, as to be in some instances almost pathognomonic, a sharp lancinating pain in the side will induce the physician immediately to infer inflammation of the investing membrane of the lungs, whereas if dull & aching, it would be more indicative

of the same condition in their substance or lining membrane if existing in the skin a tingling, creeping sensation will be felt by the patient, compared to the crawling of insects and called formication. Sometimes it is uniform & constant, more rarely it becomes irregular & even periodic, pain caused by inflammation is always aggravated by pressure, when the part is said to be tender; a fact which is exceedingly important as assisting us to form our diagnosis, between the truly inflammatory & that which is spasmodic a patient may be writhing under pain, & yet pressure does not aggravate but greatly mitigates his suffering, this we know if occurring over the region of the stomach to be dependent upon a spasmodic condition of its muscular fibres. & great relief is afforded by the same agent to those labouring under pain from the passage of a gall-stone through the cystic or ductus communis choledochus; but the slightest pressure upon an inflamed organ causes intolerable anguish. - Swelling - also depends partly upon congestion of the blood-vessels, but a small portion only can be assigned to that cause, as it results

almost entirely from effusion into the interstices of the dissiased tissue; a serous fluid is at first exuded from the turned vessels, whose circulation having been arrested, seek to disburden themselves by permitting the escape of their more aqueous constituent, into the areolar tissue, which from unremitting pressure deprives the integument of its healthy elasticity, in consequence of which, sitting + edema ensue; afterward the exudation of lymph, an albuminous matter takes place, transparent when first effused but rapidly becoming opake + assuming a consistence which increases to solidity, it is by this product of inflammation that separation of tissue is effected, continuity restored + perforations prevented, owing to its susceptibility of organization vessels speedily form through its substance + establish union with the adjoining tissue, the time required for its production is variable, Dr Thomson noticed a distinct stratum covering a wound four hours after its infliction + organization has been effected in twenty-four, generally several days elapse before the occurrence of that phenomenon; blood is sometimes

poured out in substance in acute inflammation and rupture of minute vessels is not unfrequent; pus also classed among the products, & is thought to be owing to the transudation of colourless corpuscles. The presence of serum is not a certain symptom of the disorder, nor is the effusion of blood decisive, but the exudation of coagulable lymph is an infallible indication, the formation of pus, is an invariable evidence of its having existed in some part of the economy; but as it is capable of being transfered to distant organs, through the circulation, we are not always justified in assigning it to be the product of an inflammatory condition of the seat in which it may be discovered; the degree of turgidity is always proportionate with the density of the structure in which it occurs & may be independent of inflammation as in œdema, from dropsical effusion, sclerotitis and iritis are examples of its absence. Constitutional Symptoms – When the inflammation has been of sufficient intensity to disturb the system it becomes manifest by fever, whose type varies according to the

stage to which the disease has progressed. Inflammatory fever which has received the technical name pyrexia from one of its most prominent symptoms - heat - accompanies the earlier stages of the disease, & is most constantly present in the more acute forms. Its most obvious symptom is an increased action of the heart and arteries, indicated by a full frequent & hard pulse, but alone it is equivocal as the same condition may be caused from sudden emotion & violent exercise, which however is transient. The temperature of the surface is augmented admitting of great variation, from innumerable circumstances, such as the season, constitution of the patient & quantity of bed-clothing, the actual degree of heat is not to be correctly estimated by the sensations derived from feeling the part, which is sometimes disagreeably warm, when the thermometer will show the temperature to be several degrees below that of blood in health neither can the sensations of the patient be relied upon, for whilst one individual may be oppressed with heat, when the thermometer applied under the tongue proves it to range from 92 to 96°, others

have been known to complain of chilliness at a temperature of 105° as mentioned by Dr Thomson in his lectures. The perspiration becomes suppressed causing the dry & arid state of the skin, so constant in symptomatic fever. Dr Cullen refered it to a spasmodic condition of the capillaries, a theory which he assigned as the cause of all fevers. Some hold that all the secretions are similarly affected, which they endeavour to confirm by citing the arrest of discharge from ulcers, the diminution in the quantity of urine passed in febrile affections & by the dry & clammy state of the mouth, from defective secretion of saliva. Nausea, Anorexia, & Vomiting are supposed to result from the same origin as consequent upon an alteration of quantity & quality of the gastric juice, the appearance of the tongue, being furred principally in the middle and posterior part is another constant symptom and in connection with the predominant signs enumerated determine its existence. Inflammatory fever is subject to great modification from the seat of the inflammation, when occurring in the stomach

intestines & peritoneum the tendency of the fever is to assume the typhoid type, with great depression of the nervous system & heart's action, also when attacking persons of weak constitution, debilitated by the habitual use of spirituous liquors & long continued stimulus. Should inflammation proceed to suppuration, that event will be determined by a peculiar set of symptoms, characterizing the hectic grade of fever, commencing with rigors & succeeded by flushes of heat, particularly on the cheeks, in the palms of the hand & soles of the feet, appearing generally in the evening. It may likewise proceed from any drain on the system as profuse discharges from chronic sores, in weak mothers suckling their infants, & in consumptive patients. When it destroys the tone of the system and depresses the powers of life, a full, rapid, but easily compressed pulse, with drowsiness, subsultus tendinum & carphologia, denote typhoid fever & speedy dissolution. In inflammations attacking internal organs the physician is frequently left no other means than the constitutional symptoms, from which to form

his diagnosis & determine his treatment, which must also be adapted to the character of the fever, as clearly discriminating between the stages & designating the plan of management applicable to each particular case varieties - It has been divided by Authors into many varieties & no unanimity appears to exists with but one exception, all recognising the acute & chronic forms, when of sudden occurrence & passing speedily through all its stages, accompanied by violent symptoms constitutional as well as local, it is termed acute, but when the attack is of doubtful beginning & advances tardily with mild symptoms, it is called chronic & slowly proceeds to a distant, but equally dreaded termination, The acute form whose sequelæ excite but little apprehension on the part of the practitioner is more easily subdued and tends to a hasty result whereas, the chronic is more untractable & produces changes, which are serious in their nature & fearful in their consequences, causing induration, agglutinating investments of organs, thereby impeding their motions interrupting their functions, & tending to the formation

of pus, & perforation, when attacking serous membranes, these forms, though differing in the severity of their symptoms, in the rapidity of their march & danger of their effects, are of the same species, opposite only in degree. Writers in their necessity for a term to designate an intermediate grade have adopted one which they call, sub-acute, a form which does not possess all the characteristics of the more violent kind, but manifest a disposition to run its course more quickly than the chronic & known by many of its symptoms. Active & passive are used by some authors to describe distinct forms, but the are objected to, as bearing no perceptible difference between acute & chronic. Latent is applied to that type which stealthily attacks and secretly passes through the several stages, without giving any evidence of its presence so that the physician having been deprived of symptoms denoting an inflammatory action, is astounded at the extensive injury revealed by post-mortem examination.

Common & Specific - All persons are liable to common inflammation, that form which may result in any constitution, from the ordinary external causes, as the effects of

cold, and applications of all irritating substances, mechanical & chemical, differing from the specific in as much as the latter requires for its production, a peculiar exciting cause, which is also capable of propagating its own species by contagion or infection. Small pox, scarlatina measles &c are examples, as likewise syphilis, which though having a similar tendency to the common, is different in its effects. The classification into healthy & unhealthy was adopted by Hunter, the former is that which ensues in strong & sound constitutions, having a natural disposition to terminate in health without effecting deleterious changes in its progress. the unhealthy is sluggish in its march, evincing no inclination to recovery, but tends to extensive diffusion

Results - Discrepancy of opinion has existed among pathologists with regard to the proper designation for the different stages of inflammation. Termination has been used by some, but objection is made to that appellation, as the malady does not end in every event, resolution & mortification being the only two terminations one in recovery the other in death, results, events, effects &c are used according to the

fancy of the writer, & as all are effects we prefer the latter. When inflammation has been lighted up in a healthy person, its tendency is to resolution, which consists in the gradual recession of the disorder, nearly in the same manner in which it became developed, the circumference becomes paler, the pain diminishes, the heat slowly assumes the same temperature with the neighbouring tissue & the swelling partly subsides, but does not entirely disappear with the other local symptoms, remaining to be removed by absorption, a process which is gradually accomplished, requiring in some cases, a considerable time for its completion, the pulse becomes more compressible, the tongue assumes its natural colour, the appetite returns, & all the symptoms vanish, leaving the patient well. Exudation. But should the disease proceed despite the efforts of nature & medical skill, then the exudation, (a term which we design to include all the matters effused, & severally treated of as seperate results by some pathologists) follows, the escape of serous fluid is one of the earliest effects of inflammation & is invariably present in the earlier stages, from serous membranes it

sometimes takes place to a prodigious extent, forming the most formidable symptom with which the physician has to contend, as in the pleuritic cavity, which not unfrequently becomes completely filled by it, compressing & incapacitating the lung at the peril & oftentimes extinction of life, the heart may be entirely dislodged from its situation & be felt to pulsate on the opposite side, from the same cause, also embarrassed in its motions and totaly arrested in its functions, from effusion into the pericardium, a small quantity formed out beneath the arachnoid membrane & into the ventricles of the brain, will produce compression & give rise to coma, in which manner death may close the scene, but its consequences are often anticipated by the exudation of coagulable lymph, supposed to consist of the fibrinous ingredient of the blood, slightly modified, which effectually prevents its destructive result, by producing adhesion of the membranes & closing the sac, in which case the inflammation derives its adjective from its effect & is called adhesive, Lymph whose properties were glanced at on a preceding page, though productive

of so many salutary changes in the economy, is not entirely devoid of injurious events. In rheumatism from its known liability to be poured out upon the lining membrane of the heart, it is always a source of apprehension on the part of the scientific practitioner, who watches with diligence & anxiety for the first intimation when such an event is likely to ensue, that he may be ready to oppose its transudation with the whole potency of his skill, for the deposition of the smallest beads, upon the edges of the valves, by opposing an impediment to the circulation, gives origin to a series of symptoms, equally fatal as alarming, nowhere is the wise provision of nature, more beautifully illustrated than in the immunity given to mucous membranes, where the smallest effusion, by agglutinating contiguous surfaces would be most uncompromising to life, but sad to relate, this in common with all rules, has at least one lamentable exception, which consists in the effusion of lymph, within the larynx & trachea, whose accumulation, to often baffles all medical skill & vetoes one half of those in whom it occurs. a variety of

dysmenorrhœa, supposed to prevent conception is attended with a fibrinoid secretion & whole casts of the uterus have been extruded through the vagina. some doubt however exists as to its fibrinous nature. In violent inflammation with great distension of the vessels blood oozes through the coats, which may become ruptured from excessive tension, causing its escape in substance into the textures, an event which is enumerated as one of the effects. The next step in the march of our subject is - Suppuration - or formation of pus which is supposed to be secreted through the walls of the capillaries, not directly as such, but, induced by the changes which it afterward undergoes, it is formed from all the constituents of the blood & in the emphatic language of Dr Watson "pus is altered blood" no destruction of tissue is implied in its production as might be inferred from the presence of abscesses in cellular tissue, resulting from the suppuration having passed into ulceration, sloughs, popularly called 'cores' consisting of tough fibrinous concretions are calculated to convey the same

impression. When the inflammation is acute the transition into suppuration is to be expected especially in loose cellular tissue, after the inflammatory condition has existed for a considerable time the pain becomes throbbing & accords with the pulsations of the arteries, redness, pain & swelling diminish in degree, & the symptomatic fever is succeeded by the hectic, the patient being alternately attacked with chillness & flushes of heat then, we know that the formation of pus has commenced, the tumour becomes softer, elevated in the middle or most dependent portion & communicating a sense of fluctuation when pressed upon, the skin becomes nearly transparent & finally yields to the continued process of absorption, giving exit to its contents, but when it occurs beneath dense, inelastic structures, as in the palm of the hand, if the surgeon does not assist its escape, burrowing supervenes, extending the pus to a fearful extent. Ulceration consists in the softening & removal of successive laminæ of tissue, commencing from the surface and producing an excavation known as the ulcer, excoriation

is often the first step in the progress of its formation the integument becomes inflamed, loses its vitality & peals away, leaving the subjacent parts raw & exposed, with numerous red eminences of great sensibility and bleeding from the slightest irritation, studding its surface, the adjoining texture is inflamed and painful in proportion to the character of the ulcer which extends with various degrees of rapidity, according to the constitution of the patient, predispositions and previous habits of life. In persons enjoying good health, having indulged in the good things of life with moderation the inflammation rarely arrives at this stage, should it however, by possibility have progressed thus far Dame nature seldom permits it to continue its incursions long. lymph is secreted more rapidly than absorption or removal is effected, and the restoration of disintegrated parts is accomplished by granulation or the "second intention" Should the patient be so unfortunate as to have inherited a strumous diathesis or be paralyzed in the energies of his system by the baneful influence of mercury

unskilfully administered, the ulceration will assume a most obstinate tendency to proceed, regardless of all remedies to check it, continuing to eat away the adjoining textures, with a gnawing pain, characterizing the phagadenic variety, when large portions of the diseased part, lose their vitality and come away together it is said to be a sloughing ulcer, when hardened around its edges, of a pale ashen appearance, with but little discharge, sluggish in its march, almost stationary in its progress, it is termed indolent the reverse of which is denoted by excess of action, in the vessels, which throw out exuberant granulations requiring to be destroyed to promote the healthy process, a form which is termed by some, the fungous ulcer, vulgarly "proud flesh" Many others are recognised by Surgeons, as the irritable, fistulous, weak &c Mr Hunter attributed it to absorption holding, that the tissue feeling its want of vitality becomes absorbed by its own lymphatics, the arguments adduced in opposition to it are numerous. In the first place, absorption is less active during

inflammation as proved by sprinkling nux vomica upon an ulcerated surface with but little effect which if applied to a healthy wound, would be productive of pernicious consequences. 2ᵈ absorption is a very slow process, ulceration very rapid. bone is readily absorbed before an aneurismal tumour but slow to ulcerate, whereas cartilage yields very reluctantly before an aneurism and ulcerates much more speedily than bone, though the latter substance cannot be said to be more abundantly supplied with lymphatics. The skin is prone to ulceration, as also mucous membranes and areolar tissue. the other tissues all possess different degrees of liability. vessels and nerves not unusually remain perfectly entire after the surrounding parts have disappeared muscles, ligaments and tendons are slow to assume that action, often remaining dissected out, as by the scalpel. But that all structures of the body are susceptible of ulceration and capable of yielding only in different degrees, is proved

by the successful efforts of nature in effecting the seperation of dead from living parts in mortification which final effect we next proceed to consider. There are two stages in this termination, which have recieved respectively the appellations Gangrene and Sphacelus, and though generally used with the same meaning, have properly different significations, Sphacelus is the total death of the diseased structure, in which every fibre has become deprived of its vitality, and consequently beyond the possibility of recovery. Gangrene consists in the impairment, but not complete destruction of the powers of life, nature though crippled may with judicious assistance be enabled to triumph over her merciless foe, by obviating the natural & too often fatal tendency to result in Sphacelus. Humid and dry are expressive of opposite forms of mortification, the former resulting from an obstacle to the return of venous blood, inducing congestion of the fluids which in obedience to a law of nature become

decomposed and generate gases, the product of dissolution, sometimes made audible in their escape, as heard during an amputation, performed by Dr Smith and related by him in his lecture of 48.
Dry gangrene is the effect of a defective supply of arterial blood, to the part, which in consequence of inaction, become shriveled mummy-like & hard, almost to ossification. The main division is into constitutional and local, the former occasioned by constitutional depravity and having once begun, speedily progresses to the vital organs, involving all tissues in its course, and quickly terminating in death. This melancholy predisposition is frequently contracted by continued excesses, which debilitate the tone of the system and prostrate the resources of nature. Local is that which may result from any exciting cause of inflammation and confined to a particular part, without extending farther than the structure first implicated, but becomes arrested by the effort of nature whose

chief-marshall under favorable circumstances invariably forms his redoubt and establishes a boundary-line which insures security for the present & not indemnity for the past, and to which the enemy is forced to succumb even at the peril of her own life
a distinct red line is formed which is called the line of demarcation, as seperating the dark, livid and dead matters from the living and healthy tissues
If the Surgeon be not present to anticipate and relieve nature, she proceeds to effect her own liberation, a circular white vesicle is seen forming completely around the member (if it be a leg, arm &c) upon the red band of adhesive inflammation which breaking, exposes a concatenation of minute ulcers, which form a furrow and widens as it progresses, thus gradually effecting the amputation tying her arteries as she cuts her way, stagnation precedes the division and by coagulation opposes an obstacle to the escape of blood. - An article on the blood in this place may appear "mal apropos" but not finding a more convenient one for its insertion

we risk censure and proceed to notice its condition.

State of the Blood – Its appearance during inflammation has been the subject of much interest and source of numerous conjectures, most of which have been falsified by experiments, leaving but little substantiated upon which we can rely, its elements are the globules or red particles and liquor sanguinis, composed of serum and fibrin, when drawn from a vein in health, the former together with the lymph, subsides to the bottom, leaving the serous portion floating at the top and termed respectively serum and crassamentum, But when inflammation exists its presence is denoted by a peculiar condition of the blood, which has received the name of buffy coat from occupying the surface, and imparting to it a yellowish tinge, consequent upon the presence of fibrin it has been ascribed to slow coagulation, whereby it was supposed that the globules became enabled to disentangle themselves from the fibrin & subside, but although the separation into serum and clot is generally more tardy in inflammation, yet the theory does not bear the test of scrutiny, for healthy blood confined in the vessels of a

living animal, by ligature coagulates slowly, without any manifestation of the buffy coat. It has been observed also, that in seperate quantities of blood in which the buff did not appear, from twenty to forty minutes elapsed before coagulation began, whereas it was present in others, when coagulation began in five minutes. The great Hunter thirty years of whose life was spent in the study of inflammation attributed it to an increase of specific gravity in the red particles, the fact that the buff may be absent in the first and last of four different portions of blood drawn at the same bleeding & present in the second & third and "vice versâ" has led some to assign it to a vital change which being a vague and unintelligent term, has at least no fear of refutation
Microscopical observations by Wharton Jones, are explanatory of this mysterious appearance, he tells us that in healthy blood, the globules may be seen to unite in rolls, which seperate into a kind of net-work whose meshes contain the liquor sanguinis, the fibrin of which solidifies and gravitates with the clot, but that

in inflammatory blood, these meshes quickly contract, retaining a portion only of the fibrin, the rest being excluded float to the top where it is seen as the buff this is plausible, since the blood has been proved to be richer in fibrin than during health. by Andral and his associate Gavarret) the quantity is subject to great modification from the shape of its receptacle and the manner in which it is drawn, a portion contained in a broad shallow vessel may not exhibit the buff at all, or in small quantity but can be seen in abundance in that abstracted at the same time if received into a deep, and narrow bowl or basin If drawn from a small orifice and permitted to fall from a distance of three or four feet its formation is said to be prevented, it has been seen in blood taken by cups but never been known in that abstracted by leeches. It rarely appears in the commencement of inflammation

but generally requires that the disorder shall have existed at least a day before it is made manifest, which is an argument adduced in support of the opinion, that the blood must pass through the vessels of the inflamed part, before it can acquire the disposition to buff. This phenomenon is not limited to inflammatory diseases, its general occurrence only establishing it as a rule with the exceptions that it is seen in the blood of pregnant females and persons of full habit, also in such as are accustomed to be periodically bled. Finally we have to consider the treatment, and our task is finished. In the management of inflammation as of other diseases and causes which are necessarily followed by effects, if we remove the former, the latter ceases, provided the constitution has not been impaired by its protracted existence the maxim "cauam tolle cessat effectus"

we frequently have opportunity of practising and often the satisfaction of seeing fully verified. Should it be supposed to have originated from the introduction of a foreign substance the irritating cause should be sought after and extracted, which will, if the disease be in its incipiency, be succeeded by the subsidence of all the symptoms and the termination in resolution. There is but one exception to this general rule, which is, that bullets, shot and such substances, lodged in some organs only excite sufficient inflammation to produce an envelope of lymph which deprives them of danger, and by confining them to the seat which they occupy avoids further irritation where they may remain a series of years unproductive of serious consequences. Therefore if deep-seated and difficult of removal, it is considered better surgery to permit them to remain, than subject the patient to the pain and peril of a long and tedious operation

if the inflammation occurs internally and be attended by all the symptoms of pyrexia, the first business of the physician is to place his patient under the antiphlogistic regimen, all means of excitement dietetic and external should be strictly prohibited, small quantities of unstimulating food, perfect rest and quietude, with naught to disturb the mind or move the body, the exclusion of prating friends and avoidance of topics calculated to agitate the mind and create emotions of sudden joy or grief, which arouse the nervous system, accelerate the circulation and send with greater rapidity the blood to the disordered part, should be imperatively enjoined upon the attendants of it attack the arm or leg, the current of blood may be greatly impeded, and diminished by elevating the limb, which reverses the influence of gravity and facilitates the venous circulation whilst it proportionately retards the arterial.

Scrofulous inflammation especially of the lymphatics

glands of the neck, and in strumous ophthalmia requires a regimen nearly opposite that of the acute, with violent inflammatory fever. nourishing diet and gentle exercise are amongst the most efficient means of promoting cure & oftimes the only remedies from which any salutary effects can be produced. Of all the remedies in inflammatory eye are esteemed or trustworthy as the abstraction of blood, general and topical, by cups, scarifications, leeches and the lancet, by phlebotomy and arteriotomy The median cephalic and basilic are the veins upon which phlebotomy is generally performed, but if the person be very corpulent rendering it impossible to reach them without danger, as is not unfrequently the case in children, the temporal artery is usually selected for arteriotomy, as being superficial and easily compressed. General bleeding is resorted to for the purpose of diminishing the quantity of blood, and preventing the determination of fluid

to the inflamed part, the indications for which are the pulse and degree of pyrexia, which however accord with each other. The inflammatory pulse is frequent, full, and hard, giving the sensation to the finger of a cord, which when pressed upon yields reluctantly and rebounds when removed, owing to the increased action of the heart, which contracts from 100 to 120 times in a minute, such a pulse independent of its concomitants, does not always indicate bleeding, as that of a person profusely bled from hemorrhage, may possess the same qualities. From the anemic condition it may be present also in one labouring under rheumatism, slight in degree, and less liable to injure than the bleeding which would reduce and enfeeble, and predispose to endocarditis without any benefit to the sufferer. In venesection the physician should be directed not only by the condition of the pulse and degree of pyrexia, but also by the importance

of the organ affected, age of the individual, sex temperament, and stage of the disease, all these should be weighed in the scale of judgment which requires rectification by experience, then if in conjunction with the pulse described there be hot skin, furred tongue, and flush complexion, blood should be taken, unless the experience of the profession testify to the prevalence of an epidemic, in which, it becomes perilous to be governed by the same symptoms which guide us before. In bleeding the impression should be made as soon as possible, therefore the orifice must be large, and the blood permitted to flow "plena rivo" whilst the patient is in the upright or sitting posture to facilitate the return of blood from the head, and more rapidly induce syncope, the quantity required to produce this effect is said to be proportionate to the exigencies of the case, therefore if nervous symptoms should be mistaken for inflammatory, the question will easily be decided by the lancet, speedily producing syncope, whereas,

it is surprising in some cases, to see the amount that may be drawn without the induction of fainting Dr Watson tells us in his valuable practice of Physic that he stood by and saw the enormous quantity of seventy two ounces taken from the arm of a man before any symptoms of syncope were made manifest. Cupping and leeching modes of topical bleeding, are generally practised to relieve engorged capillaries & palliate local symptoms, which is often necessary even after the patient has been bled "ad deliquium animi". Le Franc has established as a general rule that venesection should be resorted to in inflammations of serous membranes & parenchymatous tissues, & that cupping or local depletion is most appropriate in those seated in the mucous membranes" in young children whose veins are imbedded in adipose tissue, it is deemed better to apply leeches, than incur the danger of bleeding from the jugular vein. In chronic cases also local

bleeding is more available, than Phlebotomy by relieving the capillary congestion and diminishing the quantity of circulating fluid without prostrating the patient. By reference to the pulse again we wish to add that the physician cannot always rely upon a full, frequent, and hard pulsation, to acquaint him of the presence of violent inflammation, as those of the abdomen are frequently attended by a small and rapid pulse, characterized by no distinct hardness, but should he neglecting this deviation, bleed, he will find the pulse rising and partaking more of the inflammatory character, than previous to the operation, which shows that an impression has been made upon the system, when bearing in mind the tendency to death by syncope the orifice had better be closed, and opened if need be, the second or third time, than attempt to reduce the circulation, which may be fatal, Next in importance is mercury and its preparations which possess the properties of diminishing the

ced particles of the blood, depriving it of its plastic properties and thus controling adhesions. When we anticipate the effusion of coagulable lymph upon serous membranes, which are in danger of becoming agglutinated by it, our exertions must be directed to placing the system as speedily as possible under the influence of mercury, but not until the lancet has been used. For apart from its own potency, they mutually assist each other in effecting the desired object, the depletion original promotes the absorption of the mercury which more rapidly affects the constitution, and thus their union will accomplish the purpose, which each alone, might not have been able to attain but if the inflammation be of the erysipelatous nature, with a tendency to typhoid symptoms its administration would be deleterious, and in persons of a strumous diathesis, its use is highly pernicious and always to be deprecated. When given to procure its specific influence, care must be taken that it does not pass off by purgation and with this view

small quantities as two or three grains in combination with a fourth or third of a grain of opium, should be administered at short intervals, say the same number of hours as there are grains of medicine, when inexpedient to introduce it through the mouth, the desired result may be obtained by the mercurial ointment rubbed upon the axillas or groins. its impression upon the economy will be denoted by a peculiar taste, resembling metal and compared to copper or brass, and imparting a similar odour, which is sufficiently indicative of salivation and should, upon the occurrence of those symptoms be discontinued before the gums become spongy and painful, an event by no means desirable since the decease of a singular theory, which attributed the cure of diseases by its agency to the passage of the morbid principle from the system with the saliva, There are some persons in whom the idiosyncrasy exists of becoming ptyalised by the slightest dose, and in such cases the occurrence, is doubly alarming, since it is apt

to extend itself over the fauces and produce ulceration of the whole lining membrane of the mouth and fauces, exceedingly difficult to control and rendering the patient a most pitiable object, therefore it is advisable for the Physician before prescribing, to make inquiry as to its effects upon the individual that he may avoid the censure which would accrue to him and secure an unerrable appendix to his title, (prudent). Antimony from its sedative effect upon the hearts action, has been highly eulogised as a remedy in inflammations, and seems to have occupied the same position amongst Italian Physicians, as does mercury with the profession of England & America &c. its value in bronchitis, pneumonia etc. is signally beneficial and duly appreciated by medical men of this Country, but in the inflammations of serous membranes, their experience has induced them to place a reliance upon

mercury, which would require an exceedingly potent agent to supplant. Opium, The salutary effects of this drug in inflammations of the mucous membrane of the alimentary canal in suppressing exhorbitant secretions & profuse evacuations in inducing sleep and palliating pain, are facts familiar to almost every intelligent man, independent of the profession, but in few instances is the administration of any medicine, done more scientifically than that of opiates, for the relief of constipation dependent upon inflammation of the peritoneal coat of the intestines, and spasmodic contraction of its muscular fibres, from propagated irritation, here are two opposite conditions in which opium is given with benefit to both and most beautifully illustrative of the importance of pathological knowledge, to the ignorant practitioner, mention of narcotics in a costive state of the bowels, would be a matter of profound absurdity, whereas the pathologist, well

aware of the cause, freely prescribes his poppy-juice with unbounded confidence in the efficacy of its operation in producing relaxation & relief. The watery solution is a favourite external application of Prof Smiths. Cold forming, generally the best plan of treatment for wounds particularly incised, is one of the most valuable agents we have in subduing inflammation of the brain & its membranes & reducing tumidity, which, in orchitis may often be entirely effected by iced water & refrigerant mixtures. Hot fomentations & cataplasms are often productive of great comfort, & universally used to promote suppuration. Counterirritation by epispastics, rubefacients &c are important auxiliaries, by diverting the blood and irritation from the seat of disease, other remedial means are adverted to, and recommended, but classing them among the minutiæ, which are not included in the sphere of our design, we hasten to conclude.

by the adhering together of the opposing surfaces of the pericardium, roughened by the adhesion of false membranes. The sounds heard in the course of an attack of pericarditis, may be confounded, with that caused by disease of the valves or of that portion of the lungs that overlaps the heart. There is however sufficient difference in the symptoms of these diseases, to enable a person of even moderate attainments in the science of medicine, to form a correct diagnosis, provided that care be taken in the examination, which the importance of every case demands.

In this disease the prognosis must necessarily depend in a great measure, upon our previous knowledge of the habits of the patient, as well as upon the strength of his general constitution, and the severity of the attack. Persons who are of feeble constitution, those who

are attacked while convalescing from other diseases, and those also who are addicted to the pernicious habit of indulging freely in the use of alcoholic drinks, are especially liable to be carried off by an attack of acute pericarditis. It occasionally proves fatal when occurring in the most robust, owing to the great embarrassment under which the the heart labours from the immense effusion which sometimes takes place in the pericardial sack.

Some authors (among whom is Dr Wood) express the opinion that persons labouring under this disease may by proper treatment be entirely relieved so as never to experience any inconvenience in subsequent life from having once had an attack. Dr Watson however says that all who have once suffered from an attack of pericarditis, and so far recovered as not to experience any

inconvenience, or uneasiness for a number of years are nevertheless sure to have their lives shortened by the superventions of some chronic disease of the heart. Those most frequently occurring are, hypertrophy, dilitation, or disease of the valves, and these not unfrequently combined. The objects to be aimed at, in the treatment of this disease are the following. If the patient be seen in the first stage of the disease, and before there has occurred an effusion of serum, or the formation of false membranes, an effort should be made by prompt and vigorous treatment, to subdue the disease and prevent their occurrence; but if not until they have taken place, our attention should be directed to the promotion of their absorption and the restoration of the membranes so far as is in our power to their natural condition. The free use

of the lancet, is unquestionably the most effectual means of accomplishing the first indication. It is a great mistake however to suppose that depletion can be carried to the same excess with impunity in pericarditis that it can in some other inflammatory diseases such for instance as pneumonia, pleurisy, and peritonitis. Large and frequently repeated bloodlettings has the effect of greatly diminishing the globulin of the blood, and this impoverished state of the circulating fluid, causes the heart to contract more frequently and forcibly, in order that the wants of the system may be supplied by a more rapid circulation. Thus our object is defeated by causing such a condition of the heart, as that its own action is sufficient to aggravate the disease, and render it more intractable, than it otherwise would have been. There can be no rule given

as to the amount of blood proper to be abstracted, in all cases; as the robust and plethoric, will sustain a loss that would prove fatal in persons differently constituted. In all cases the physician must be guided by the effect produced on the pulse, rather than by any prescribed quantity, and as it is the simple sedative effect of bleeding that is desired, the flow of blood should be arrested as soon as that end is attained. In cases in which a general bleeding is of doubtful propriety, the local abstraction of blood by cups or leeches applied between the shoulders, or over the praecordial region, may be very advantageously resorted to. In the commencement of the treatment of this disease it is important, that the alimentary canal should be well cleaned out by some active cathartic, and those of a hydragogue character, are to be preferred on account of the copious serous evacuations which they produce.

The sulphate of magnesia will be found to answer an excellent purpose, or that salt combined with an infusion of senna. The next thing to be attended to in the treatment of this disease is to bring the system as soon as possible under the influence of mercury. This is a remedy which should never be overlooked; for it is the one from which we are to expect most benefit in the the management of the case, from its peculiar property of destroying in a great measure the plasticity of the blood, and also of promoting the absorption of the false membranes, that may have been formed. To bring the system speedily under the influence of mercury, it is necessary that it should be given in small but frequently repeated doses, and generally it will be found necessary to combine it with small doses of opium, to prevent its passing

off too rapidly by the bowels.
When the disease comes on during an attack of rheumatism, much benefit may sometimes be derived from the use of colchicum. The wine of the seed is the best form to administer it in, and may be given in doses of from ten to thirty drops three times a day. Digitalis may sometimes be required to subdue the inordinate action of the heart; but great caution should be observed during the administration of this medicine lest its sedative effect be carried too far and complete paralysis of the heart be produced. During the latter stages of the disease much benefit may be derived from the application of a large blister over the region of the heart. Blisters may, indeed, be resorted to as soon as we have any evidence of effusion having taken place and may be reapplied as soon as the blistered sur-

face is sufficiently healed. They act beneficially, not only in relieving the remaining inflammation by the counter irritation they produce, but also by stimulating the absorbents and hastening the removal of the effusion. Great care should be taken to protect the patient from exposure to cold, and hot foot-baths should be occasionally used, rendered more stimulating by the addition of a little mustard. It is in the first stage of the disease that the revulsive effect of the hot bath will prove most beneficial. Diaphoretics may also be used, and the best that can be administered is a full dose of Dover's powder, given at night after the use of the hot foot bath. Dover's powder, at the same time that it produces copious diaphoresis, acts also as an anodyne and narcotic and thus relieves the

pains and jactitation of the patient, which are apt to be most harassing at night, and to deprive him of sleep, not unfrequently for a number of nights in succession. It is of great importance that strict attention be paid to the diet of a patient labouring under this disease. All rich and highly nutritious food such as meats and soups, should be prohibited, and nothing allowed but mild farinaceous articles as rice arrow-root, tapioca and sago. During the period of convalescence, and after the patient has resumed the use of a more nutritious diet, it is important that due moderation be observed, as a relapse is liable to be brought on by too great indulgence.

An

Inaugural Dissertation,

On

Remittent Fever,

Submitted to the Examination

Of the

Provost, Regents, and Faculty of Physic

Of the

University of Maryland

For the

Degree of Doctor of Medicine

By

George T. C. Thomas.

Of

Maryland.

1849.

An
Inaugural Dissertation
On
Pericarditis;
Submitted to the
Examination of the
Provost, Regents & Faculty of Physic,
of the
University of Maryland,
For the Degree of
Doctor of Medicine.
By
Richard V. Leach,
of
Virginia.

Pericarditis

The term pericarditis, is employed to express an inflammation affecting the serous membrane enveloping the heart. This inflammation may be either acute or chronic, and brought on, not only by all the usual exciting causes of inflammation in the thoracic organs, but, is exceedingly liable to be brought on by an attack of gout or acute articular rheumatism. We shall confine ourselves however, to the consideration of some of the causes, symptoms, physical signs, diagnosis, prognosis and treatment, of the disease as we find it in the acute form. The causes that most frequently bring on this disease, are exposure to cold, especially when the body is warm and exhausted from over exertion, mechanical injury, great mental excitement, too great indulgence in the use of alcoholic drinks, the suppression of old discharges, and

in any two cases so that without calling to our assistance the evidence given by a physical examination, it would be impossible in many cases to form a correct diagnosis. This disease is usually ushered in as all others of an acute inflammatory character, by rigors more or less severe followed by headache, sometimes by convulsions, nausea and vomiting, a hot and dry skin, frequent, full and bounding pulse, tendency to constipation of the bowels, a red and furred tongue, scanty and high coloured urine and sharp lancinating pains which are generally confined to the precordial region; but in some instances they are felt most severely up between the shoulders, and sometimes they extend down the arm so far as the wrist. This pain in the region of the heart is generally much increased by pressure made over that organ, by drawing a full

breath and sometimes even by the slightest motion of the patient so as to require him to maintain one position in bed, and that is usually on the right side. From the fact of the pains being increased by pressure or motion of any kind, we are liable to make a mistake in diagnosis when called to a case, and ascribe all of the patients suffering to rheumatism. Palpitations, and a sense of weight and constriction at the praecordia, attended with great dyspnoea, are frequent and troublesome symptoms, the features having at the same time a peculiar pinched appearance expressive of great suffering. The pulse we have said, is usually full, strong and bounding, but this is far from being the state of the pulse in every instance. Sometimes we find it extremely small soft and intermittent, at the same time that the heart may be acting

very tumultuously. In other cases of the same disease we may have a regular, small, thread like pulse, but one capable of sustaining a considerable degree of pressure. It is then evident that there is no state of pulse that can be looked upon as diagnostic of pericarditis. Oedema which is more frequently a symptom of chronic pericarditis, is nevertheless occasionally met with in the most acute inflammatory cases, and is no doubt produced by some obstruction to the circulation through the heart. The blood when drawn in this disease, always presents the buffy coat and cupped appearance, that we find in inflammations generally, but especially in those of serous membranes.

After reviewing some of the principal symptoms that are most frequently meet with in this disease, and remem-

being that in some cases very few indeed are to be observed, which are considered as being most characteristic of the disease, and that, in a long series of cases we may possibly find not the same array of symptoms exhibiting in any two, we must naturally conclude that errors in diagnosis are very liable to be made; but especially so, by those who are unacquainted with the method of examination by auscultation and percussion.

The evidences of pericarditis given by auscultation and percussion, are such as may depend on simple excitement of the heart, upon the effusion of fluid in the pericardial sack, or on the rubbing together of surfaces roughened by the adhesion of false membranes.

On examining a patient labouring under this disease in the first stage, we are apt to find the the impulse of the heart much increased in force.

and its sounds more distinct than natural. Dr Wood ascribes these phenomena to the increased power with which the heart contracts, owing to the irritation communicated to it from the inflamed pericardium. In some cases, we have a copious effusion, very early in the disease, even so early as the end of the first day from the commencement of the attack, but usually, it comes on during the third or fourth day. Sometimes it is so copious as to render much more prominent than natural, the anterior part of the chest. This occurs only in the young who have not lost in a great measure the elasticity of the costal cartilages. On percussing over the region of the heart after effusion has taken place, we discover a greater degree of dullness than is natural, and this dullness is in proportion to the amount of

fluid effused. When the effusion is moderate in quantity, without due caution on the part of the practitioner it may be readily overlooked especially if the patient should be lying on his back at the time the examination is being made. In such cases the best position for the patient to be placed in, is the sitting posture and inclining a little forward. In this position the effused fluid is thrown against the anterior walls of the chest and is much more readily detected. In extreme cases we find it pressing down the diaphragm, and extending to the top of the sternum. The breathing is rendered very laborious in such cases from the pressure sustained by the lungs and diaphragm.

Hypertrophy and dilatation of the heart also give dullness on percussion over a larger portion of the chest than is natural to the healthy state; but the symptoms

of the two diseases are so entirely different from those of pericarditis, that there is no liability of their being confounded even by the most careless observer. When the ear is applied over the cardiac region of the chest after effusion has taken place we find total absence of the respiratory murmur and a very great diminution in the clearness of the sounds of the heart from the fact of their being transmitted through the liquid contained in the pericardium. The pulsation of the heart felt by placing the hand over it, is either very much diminished in its force or is entirely absent. In the first stage of the disease or that of congestion, before any effusion has taken place, and the membranes are in a much dryer condition than is natural, there is not unfrequently, a dry rubbing sound audible, and which resembles very much

that heard in pleurisy, produced by the rubbing together of the roughened membranes. Dr Wood says that in some cases there are heard as many as two, three, or four distinct sounds, they being produced by the contraction of the auricles as well as by the ventricles. These rubbing sounds are likewise heard in the latter stages of the disease, when the fluid poured out has been in a measure absorbed and the sides of the pericardium roughened by the adhesion of false membranes, are permitted to come in contact. In both cases however they are heard but for a short time. They are in the first instance rendered inaudible by the effusion that soon follows and relieves the dry and engorged condition in which we find the membranes during the first stage of inflammation, and in the second

Diaphoretics & Refrigerants play no small part in mitigating the severity of the febrile symptoms during the progress of Remittent fever. Small doses of Ipecac, Nitrate of Potash, & Spts Mindereri, are articles most frequently used in this disease & the choice of these depends pretty much on the opinion & former experience of the Practitioner. I have seen the Antimonial mixture with an addition of Pulv. Ipecac (in such proportions as to make the 1/4 or 1/2 of a gr to constitute a dose to be given every one or two hours) exert a powerful influence in diminishing the febrile paroxysm. Amongst the various refrigerants which have been mentioned by authors, I think ice by far the most important & almost the only one deserving of our notice in the treatment of Remittent fever. The stomach allows our patient to take

freely of ice (broken in small pieces) during the fever. The feelings of our patient is the best guide for its administration, whenever he wants it let him have it freely & we will not often I am sure regret our indulgence. —

Tonics & Antiperiodics are our chief means in restoring the natural tone & strength to our patients system, & hastening to a healthy issue the protracted convalescence, which so often follows an attack of Remittent fever, & the most worthy of our consideration is Cinchona & its preparations. Unlike the most of our remedies Cinchona has fulfilled the desired hopes of its most ardent admirers, & retained the stand it originally obtained, without changing the position of its effervescent virtues, only

in such a manner as to extend their influence & to ensure their power in the subjugation of a greater number of malades, than we at first had reason to hope for. Legislators & Fabius would be well set to work, in attempting to enumerate the many ideas & opinions of Physicians as to the proper manner of administering Cinchona, in the various diseases to which it has proved useful.. Nor would his labour be much diminished, had he only to speak of the many arguments adduced by authors to prove what preparations of Cinchona are most useful in Remittent fever & the proper quantity & time in which they should be administered. — Suffice it to say, that in the

Common Remittent of our State it is generally necessary before proceeding to the use of Cinchona that our patient should undergo some preparatory treatment, such as is obtained by the use of the Lancet; Emetics & Cathartics. In the malignant form of Remittent where there is no time for preparatory measures & where by the cold & pulseless state of our patients we are made aware that stimulants are indicated, then it is that Quinine should be used & used freely without delay. Quinine being the most convenient form of all the preparations of Cinchona is almost universally used by Practitioners. Some Physicians are accustomed to give Quinine in large doses

I have seen 18 or 20 grs given when I am sure 5 or 6 grs would have been equally effectual...
We should not subject our patients to the dangerous influence of enormous doses, when smaller ones will do. No particular dose can be laid down to answer the indications of each particular case. But I guess we shall seldom find it necessary to give more than 6 or 8 grs, in one dose or in divided doses, during the intermission of the Paroxysms.
Various indigenous herbs, plants & roots, are used as antiperiodics & tonics, during convalescence from an attack of Remittent fever.
The most deserving of especial notice is Eupatorium Perf., which is generally very abundant in

the moist & low lands of our State, where Remittent is so frequently seen. During the last summer my Brother had charge of an Estate upon which there was upwards of 60 Slaves. there was hardly one of these Slaves escaped an attack of Remittent or intermittent fever, during some period of the Summer or fall, I attended them almost altogether myself & finding Quinine a rather expensive article, I resorted to some Sub-stitute which grew abundantly in that region. I found it fulfil all almost every indication I had been accustomed to expect from Quinine. When administered in the proper manner & after proper preparatory measures

have been used, it is almost sure to prevent the recurrence of Chill in intermittent, & in Remittent will aid its rapidly in restoring strength, vigor, & tone to your patients system. —
So much for Remittent fever & its treatment, & although I have only given a summary view of what we shall often find it our duty to perform; yet I content myself by the propriety due to the inexperienced pen of a beginner in Medicine.
Saepe stylum vertas iterum, quae digna legi sint, scripturus. —
The directions of the old Latin Poet although of no present in my mind during my engagement in writing this abbreviated sketch, has not for want of time been pre-

-tically observed, & owing to procrastination a fault too often predominant in our Characters. I have been compelled to submit to your investigation a Thesis which I fear is more open to Criticism, than I could otherwise have wished. —

Gastric or Gastro-enteric form of Remittent fever. Physicians in the lower Counties of this State call this form of fever, Mucous fever, which I think is an appropriate name, the whole of the fever present depending upon inflammation of the Mucous Membrane of the Alimentary Canal. This fever presents besides the common symptoms of Bilious fever; symptoms peculiar to itself, for in the forming stage we have anorexia, languor, heaviness, anxiety alternate sence of heat & cold, obtuse pain in back, head, & limbs; together with evident, & independent symptoms connected with the passage of disturbance & inflammation present in the Alimentary Canal. Our patients will complain of pain nausea & vomiting, together with diarrhoea. Most generally however

I think the bowels are constipated in the commencement of an attack of this fever. When there is a predisposition to this constipated state of the bowels, in the commencement of an attack, I have always noticed the enteric symptoms to predominate in the after sickness of our patients. I recollect once of suffering from an attack of Remittent fever myself, the commencement of which was marked by obstinate constipation of the Bowels & the after treatment in my case had to be directed almost exclusively to the gastric or gastro-enteric symptoms which afterwards presented themselves. Tenderness when pressure is applied to the walls of the abdomen, particularly over the epigastric region is a very constant symptom.

I have seen persons complain even from the weight of the Bed Clothes in this fever, the abdomen being almost as sensitive as in an attack of acute Peritonitis. — The Tongue at the commencement of the attack is covered in its middle with a thick coat of white or yellowish fur, its edges presenting a smooth red & shining appearance. This condition of the tongue however is not so marked in the beginning as it is in a few days after the attack has commenced. — The pulse is generally strong & pretty full, & frequent. The countenance a little flushed. The skin hot, parched, & dry. Urine scanty & high coloured. The discharges from the patients bowels are generally green or dark coloured bilious matter together with mucous & Blood. —

Intense thirst & a constant cry for cold drinks is an unvarying symptom in every stage of this fever. Our patients will swallow a glass of ice water & perhaps eject it from his stomach at the next movement. If our patient is not treated promptly & properly the above mentioned symptoms are soon exaggerated, & we find him after the elapse of a few days, with quicker & more feeble pulse, tongue dryer & the red edges presenting a cracked appearance. Stomach more irritable. Thirst greater. The patient has often a great desire for cold effusions. He will beg you to bathe his hands in cold water, or sponge his body. He will dream that he is near some beautiful fountain & makes efforts in his sleep to reach it. —

I heard an old Negro once in this fever (who had never seen any thing beyond the Corn & Tobacco fields of his Master) describe a Stream he had seen in a dream, which from his attempt at description, must have been more beautiful to his deluded imagination, than even the Falls of Niagara have appeared to the most enthusiastic traveler.— If our patient is not improved by the treatment we adopt, his symptoms gradually grow worse until at last he have all the evidences of a true Typhoid fever. Diagnosis. There can be but little difficulty I think in forming a correct diagnosis in this disease. We are to consider the symptoms carefully, the location of our patient; the season of the year & which being done we can seldom err.—

Prognosis. This is by no means unfa-
-vorable in our Country, when our
patient can have a moderate degree
of good nursing & proper treat-
-ment. It sometimes proves fatal
in weak & enfeebled constitutions
or in very young Children. —
Out of something like a hundred
cases that I saw & assisted in
treating last summer & fall there
was but 2 that proved fatal, & one
of these was in the person of a deli-
-cate Boy, who had been brought
from the healthy atmosphere of
the Pines to the Village of Port
-Tobacco which is notorious (as I
have said before) for its noxio-
-us influence, especially upon
the health of Strangers. —
Treatment. The indications of treat
-ment in our common & milder
forms of Remittent are very simple

and pretty well understood by the most of persons living in Malarious Districts. Every Farmer in the lower Counties of our State has a vial of Calomel & Quinine a bottle of Oil & pound of Salts by which in ordinary cases he is enabled to treat any member of his family; all the indications of treatment being fulfilled when he has administered 8 or 10 grs of Calomel & followed it up with an ounce or two of Epsom Salts or Castor Oil. Sometimes it is necessary after the lapse of a few days to give a dose of Quinine to prevent the recurrence of the Paroxysms. But when the disease is accompanied with visceral inflammation, congestion or lesions then it is that the Physicians aid is called into requisition & then it is that

he has to exercise his nicest judge-ment & medical knowledge.- Blood letting. This the Great Author of our hopes in the subjugation of a majority of the diseases to which man is exposed, Ought not to be used I think in the treatment of Remittent fevers without due ca-ution. When there is symptoms of visceral inflamation, such as is apparent in the form complicated with Gastritis, & when the patients pulse & general Stenic condition indicates the use of the lancet, there can be no doubt as to the propr-iety of its employment.-
General Bleeding judiciously em-ployed, in the early part of an attack of Remittent fever, has certainly a tendency to cut short & lessen the violence of the disease.

Local depletion in my opinion is actually indispensible in the treatment of Remittent fevers complicated with Gastritis or Gastro-enteritis. I have seen a cupping glass applied over the epi-gastric region, do more good towards calming the general discomfort of a patient, than I believe could have been accomplished by all the concoctions of the Materia Medica.

It is surprizing to see how soon the irritability of the stomach will be calmed, by the revulsive influence of cups. I have seen patients almost in an instant, transferred from the agonizing sensations of intense retching & vomiting to a calm, serene & pleasant sleep. So high do I value (from what I have witnessed)

the utility of local Blood letting over the region of the Stomach when this viscera is irritable or inflamed in Remittent fevers that I would rather be deprived of any other of the suggested remedies in my treatment of this disease. –

Cathartics. The necessity of administering purgatives in an attack of Remittent fever, is a point I believe well settled by all authors & Mercury in some form, from its supposed specific influence on the secretions of the liver is considered our best & most effectual. At the commencement of an attack it is a general rule to administer 8 or 10 grs of Calomel together with some other cathartic medicine such as Jalap or Rhubarb,

Our patient should not be by passed to excessive purgation, as it is only calculated to weak-en him & prolong his convalescence, doubtless much tending to the relief of his disease. After the first good cathartic we will dispense even from it necessary to continue our purgatives, except some gentle laxative to keep the Bowels in a soluble state. -

In that stage of Remittent where we find our patient with dry tongue torpor of Bowels, scanty urine, & an acrid state of surface & when he is too feeble to bear the loss of the lancet, Mercury in alterative doses judiciously employed is our measure most to be relied on. 3 or 4 grs of Calomel together with 1/4 or 1/2 gr of Opium 2 or 3 times a day, often proves a wonderful

influence towards the relief of our patient. Various combinations of Cathartic medicines have been used in the treatment of Remittent fever, some of which virtues are I think much entitled to the consideration of the practical observer. We are to be governed in our use of Cathartics in Remittent fever as well as in all other diseases, by the various symptoms that may present themselves in each particular case. We may sometimes find it necessary to purge & depletion patients to day, whilst tomorrow he will demand stimulants & astringents. We may sometimes find it necessary to combine our mercurial preparations with Anodynes while again from proper of the Bowels we combine them with mucilaginous materials or the mutritive medicine.

An Inaugural dissertation
on
Remittent Fever
Submitted to the Examination of the
Provost Regents & Faculty of Phisic
of the
University of Maryland
for the degree of Doctor of Medicine
by Oscar A. Ferguson
of
Charles County Maryland.

February 6th 1849

The Student of Medicine encounters no little embarrassment in selecting a theme for his first production, through the medium of which his capacities are to be judged by the assured a Faculty. He contemplates collectively & separately, the vast amount of maladies & infirmities to which man's frail nature is liable, and by which his earthly career is made to terminate. - I have experienced no little of this embarrassment myself in selecting the subject of my present remarks, I have chosen Bilious fever for my investigation, not for the purpose of appearing eloquent in composition; but with a desire to mention a few practical facts which I have had the pleasure of learning in association with dancing my Medical Studies. -

And again I select Remittent fever because it is the Fever of our Climate particularly of the neighbourhood in which I expect to live. It is a disease with which I expect to be in daily contest during my future life, & the enemy whom it will often by my duty to combat & subdue. I will not attempt in my description of Remittent to enumerate the many idle hypotheses which have been promulgated by Authors concerning the true nature of this disease. But consider it a continued form of fever presenting at times distinct exacerbations. Remittent fever is recognised in three varieties by physicians in the lower counties of this State viz. Nervous, Gastric & Congestive, in all of which they attract Domestics differences & similar fevers Symptoms & treatment.

As it would require great labour & more knowledge & experience than I possess, to describe accurately the three varieties above mentioned.-
I beg leave to decide what I have to say, more particularly to the consideration of that form, complicated with evident symptoms of deranged stomach & bowels. I mean the Gastric or Gastro-Enteric variety, which is by far the most common, & by far the least definitely described by Authors of the present day.-
In conversing with old Practitioners of Malarious districts, I have found them universally to agree in pronouncing Gastritis or Gastro-Enteritis, a sure complication of Remittent-fever, before the visitation of Cholera in 1832. They say before that period that Fast Emetics

and Sulph of Magnesia were their chief & almost only remedies. The principle indications of treatment being, to clear out the Alimentary Canal by means of an Emetic Cathartic. Since the year of 32 however Gastritis & Gastroenteritis have been very common complications of Remittent-fever, & they have gradually pressed their old favorite Tart & Salts almost wholly out of medicine & have been compelled to call to their aid, the Lancet & Cupping Glass, together with Germ-waters & Anodines; Agents whose virtues it was formerly almost unnecessary to know in the treatment of Remittent-fever.

Causes. Among all the endemic diseases we meet with described by Authors, we are probably able to meet with none whose privilege

of attack is so unlimited as that of Remittent fevers as to his geographical boundaries are so extensive, as those of Periodical fevers generally. The North, South, East & West are all subject to its savages. It however with equal frequency & violence; it always shewing a preference for the Mississippi Lin & Mississippi localities of our Country where Malaria its Handmaid, its Friend & almost only Cause, is known to be most plentifully generated & dispersed. It is not my intention in speaking of the Causes of Remittent to mention the Comparative frequency of its attacks in the various localities of our Country; but severally to speak of it, as seen in the lower Counties of our State. —

Malaria. There is no discrepancy in opinion, I believe, in pronouncing this substance or agent - (for substate to be recognized by our senses & for fugitive to be caught by any of our contrivances) to be the essential & efficient producing cause of Periodical fevers; yet we will find great contrariety of opinion among authors when they come to speak of localities which are most fruitful in the production of this unknown substance; as when we speak of the surplus elements deemed necessary for the composition of this noxious poison. -

From the time of the Italian physician Lancisi (who in 1695 was the first to put forth distinct ideas concerning Malaria) to the present day, we will find

many Physicians who believe putrefaction of vegetable matters cal-most essentially present in the production of Marsh Miasm. I likewise (notwithstanding I have read Dr Watsons arguments against this doctrine, in his lectures on Materia) am inclined to think that true Marsh Miasm, what I mean is, the general cause of an Remittent fever in this State; can not be effectually produced without the presence of some vegetable or animal putrefaction. Port Tobacco the metropolis of my native County, has always been notorious for the production of Bilious fevers & as Lima has called Hungary the grave of Germany; so Port Tobacco has with equal propriety been called the grave of Charles County.

This village is situated near an extensive marsh & nearly on a level with it. The marsh is influenced by the ebb & flow of the waters in the adjacent Creek, so that it is wet during high tides & almost entirely dry, when the tide is low & the weather moderately dry. Now although the moisture afforded by the tide is sufficient for the production of vegetable matter on this marsh, it does not seem sufficient to keep alive the vegetation when produced, during the long & dry summer months. Consequently there is vegetable putrefaction going on upon this marsh during a dry season; whilst on the other hand when the summer is a wet one, vegetation is kept alive until the approach of frost & there is no putrefaction of vegetable matters.—

This village is very unhealthy in a dry Summer, whilst it is comparatively healthy in wet & seasonable weather. I know of no better way to explain the difference in health in the different seasons, than by this vegetable putrefaction. Which is according to reasoning of common sense by far more abundant in the former than the latter season.

Exposure to heat is enumerated by Authors, as one of the exciting causes of Remittent fever; but in my opinion this is comparatively harmless, without we are in some manner during the same 24 hours exposed to the night air & dew. I know an old Physician of a malarious district who rode all day, exposed to the scorching rays of the sun, during the months of July & August & declares he felt no fear of fever,

without he happens to be caught out at night. In other words he attributes the danger to vicissitudes in temperature & not to the direct influence of heat itself. It is a remarkable fact which I have noticed, that the Negro part of our population very rarely are attacked with Bilious fever, until the latter part of September, which is attributable I think to their being exposed during that month a part of the night as well as the day in delivering the crops of their employers.—
Age & Sex has but little to do in producing Remittent. We see it oftener in men days Dr Bartlett. because they are subject to greater exposure.— There can be no doubt concerning the influence of Race in the production of Endemic fevers & although the Negroes

of our country are not exactly pro-
-tect against Remittent fever; yet they are
comparatively free from its ravages. Were our British population
subjected to the same exposures,
the amount of fatality would be
far greater & our prognosis ren-
-der vastly more serious than at
the existing circumstances. —
Indiscretion in diet; indulgence
in perturbating passions, intem-
-pe mental anxiety; In fact al-
-most every thing which has a
tendency to disturb weaken or
lessen the vital energies, have
been rec'kon'd among the predisp-
-osing & exciting causes of
Remittent fever. —
Symptoms. I would like as I said be-
-fore, in speaking of Symptoms &
treatment, to be understood as re-
-ferring more particularly to the

An
Inaugural Dissertation
on

Scarlatina

Submitted for the examination
of the
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of the

University of Maryland

For the Degree
of
Doctor of Medicine
by

D. R. Hardy
of
Ohio

To the Medical Faculty
of the
University of Maryland

This Thesis

Is respectfully Dedicated by
the
Author

Gentlemen

In accordance with the regulations of the University of Maryland, it becomes necessary that I should write a dissertation upon some subject connected with medical science; prior to my examination for the degree of Doctor of Medicine. The subject which I have chosen for this dissertation is;

Scarlatina

In writing upon this disease, I do not expect to add to or to ~~add~~ increase the number of symptoms, nor to improve upon or to alter the plan of treatment adopted by men whose experience and scientific acquirements render them capable of judging - If in the few remarks which I am about to make, you should find many things which are crude and inconsistent, You will remember who it is that has undertaken the task, And be lenient in your judgement -

Scarlatina, from the frequency of its occurrence - and the great danger which generally accompanys it, demands the greatest attention and care from the Physician - This disease has been defined, to be; a contagious febrile disease, the distinguishing marks of which are; a diffused redness of the skin and the mucous membrane of the mouth and pharynx - which usually appears upon the second day of the fever, generally terminating about the fifth or sixth day. Scarlatina in a great number of instances is accompanyed with inflam-mation of the throat, of a sanguinous character. Other parts become also involved, during the progress of this disease - giving rise to lesions of greater or less severity. The form of the attending fever is various, and modifies in a remarkable degree, the aspect of the malady In some cases the constitutional symptoms are so trivial as scarcely to attract attention;

whilst in others, the febrile symptoms are those of a high inflammatory excitement. In individual instances, or during the prevalence of an epidemic, the fever is of a low typhoid form, the local inflammation with which it is associated, partaking very much of the same character.

Causes

This disease appears to be; and in truth is, induced like other contagious diseases by exposure to the influence of a specific poison. Attempts have been made to propagate this disease by innoculation - all of which have proved unsuccessful. That Scarlatina may be and is; propagated by contagion; is we presume admitted by those who profess themselves sceptical upon the subject of contagion in general. Instances of this disease spreading in a manner, which can only be explained by admitting its contagious nature, are so numerous that practitioners of the most limited observations

have had ample opportunity of determining the question. I think we may regard this question then, relative to the contagiousness of this disease as a settled point - not admitting of any doubt. The time elapsing between the exposure to the contagion, and the manifestation of the disease, is exceedingly various sometimes it makes its appearance in a few days; at other times it may make its appearance in twenty four hours - And in more rare instances it may not come on for ten days. Persons who have been exposed to Scarlatina, should never regard themselves safe from an attack, until a sufficient - length of time should have elapsed as to render it certain. This disease is more prevalent during the fall and winter months, than at any other seasons of the year. Scarlatina occurs more frequently in the early, than in the advanced periods of life. when it manifests-

such a preference for children, or persons who are young; it is difficult to determine. Persons who have had Scarlatina once, are generally safe from a second attack; in this respect, it exactly obeys the general law of contagious diseases. Scarlatina in its course is subject to prominent modifications; and Authors have, in consequence, divided it, into several varieties; according to the severity or mildness of the symptomes, the nature of the attending fever and the character and violence of the local affections. The names that have been given to the three varieties are as follows 1st Scarlatina Simplex; 2nd S. Anginosa; 3d S. Maligna.

Symptomes

S. Simplex. this division is characterised by the following symptomes; We have all the premonitory symptomes of febrile diseases. The Patient is seized with chills, alternating with flushes of heat. nausea. pain in the head and lower extremities. the Skin is hot and dry. the

pulse frequent and quick. Commonly within the first forty eight hours, after the commencement of the fever, an eruption, of a scarlet colour, comes out; making its appearance first upon the face, and then on the neck, body and extremities successively - the mouth and fauces are the most parts implicated. The eruption at first consists of minute red points - which coalesce, giving a diffused blush to the skin. it sometimes occurs in blotches - leaving the intermediate skin of a natural colour. The papillae of the skin become enlarged - giving a roughness to the skin - by making pressure upon the skin a transient white spot - is left. The tongue in its centre is covered by a thick white fur whilst its edges are of a red colour. The pulse is usually tense and vigorous. delirium often makes its progress appearance during the progress of this disease. These symptoms are generally more seen in the morning than at any other time during the day

In ordinary cases of scarlatina, the eruption makes its appearance on the second day and it may be regarded at its hight on the fourth, begining to decline about the seventh or eight day. there are symptoms which commonly accompany this variety

Scarlatina Anginosa

In this form, all the symptoms are more aggravated, the premonitory stage, is attended by severe pains in the head. the inflammation of the throat is much greater, the pulse is more frequent; but not so strong and regular, as in the simple variety. the eruption is later in making its appearance, than in the first mentioned division of this disease. in this form the efflorescence, frequently disappears the day after it comes out; and "reappears partialy, at uncertain intervals; the duration of the complaint is thus lengthened, and the desquamation is more irregular" ulceration of the tonsils and palate, scarcely ever take place

if the fever declines as early as the fourth or fifth day. but if it is violent and protracted beyond this period, ulceration is almost certain to ensue During the eruption stage, the brain is frequently affected giving rise to deep and fatal coma The progress of this distinction, differs greatly in different cases, Sometimes the deviation from health is so slight as scarcely to merit the name of disease - and sometimes all remedial treatment proves utterly useless.

Scarlatina Maligna

At the commencement of this disease it is impossible to determine what character it will assume. After a few days, we are enabled to distinguish this variety - because of the violent and alarming symptoms which attend it. In this form of the disease, the eruption makes its appearance at very uncertain and irregular periods. it is of a pale colour when it first comes out. subsequently, assuming a dark and livid hue. The

eruption is more likely to disappear in this; than in the other forms of the disease. The skin is hot and dry; the pulse, which is generally active in the commencement, becomes small and feeble, in the course of the second day. the tongue presents a dark or brown appearance and is exceedingly dry and rough Delirium soon takes place, and continues with the disease until its termination. The Patient becomes pale and oppressed, he complains of disseminated pains in the head, giddiness and nausea, and he experiences great difficulty of breathing, caused by the inflamm-ation of the trachea - the prostration is so great - that the patient is unable to make much exertion. the mind becomes disordered and confused and indifferent to surrounding objects. The bowels are usually constipated in the beginning - but as the disease approaches a termination. diarrhea makes its appearance Bleeding from the mouth and nose; and sanguinous

spots are not uncommon, towards the fatal termination of the disease. In fact all that can be said of this form, is: that it is as fatal in its termination as the first is favorable

Diagnosis

The diagnosis of this disease is frequently exceedingly difficult. The disease which it is most liable to be mistaken for, is. Measles It can be distinguished from this disease by marking the period at which the eruption makes its appearance - and also the character of the eruption itself - in Scarlatina the rash comes out commonly on the second day of the fever, attended with inflammation of the throat. In rubeola, the rash does not make its appearance until the fourth day - its appearance is ushered by sneezing, inflamed and watery eyes and other symptoms of a catarrhal nature The eruption of Scarlatina consists of minute red dots diffused over the whole body. whilst that of Rubeola consists of irregular patches, with

interstices of skin, having a natural colour
Rubeola is a milder disease, and is much less
to be dreaded, than the simplest form of
Though at times highly inflam a milder disease
Scarlatina. The eruption in Rubeola does not
terminat by desquamation. The anginose
inflammation and the appearance of the tongue are
nearly always wanting in this disease. These
are the principal marks by which we are enabled
to distinguish, Scarlet fever, from Measles.

Prognosis

The prognosis of this disease, must be exceedingly
various, since it occurs under so many varieties
from the mildest, to the most fatal degree
of violence. In the simple form of this disease
no apprehensions need be felt for the safety
of the patient, unless some dangerous secondary
affection should supervene, during the convalescence
of the patient, from some imprudent exposure
to cold or other causes. It is advisable even in
this simple form, to be cautious in making
your prognosis; for the disease may soon for a

few days, in a mild and regular manner and then, suddenly to assume a highly dan-gerous character. and this is more likely to be the case, if the epidemic is a very severe one The anginose variety of this disease can never be regarded as free from danger. the last division of Scarlatina. is deservedly regarded as one of the most fatal and dangerous of maladies. we may form an opinion of the danger of the disease, by the violence of the inflammation of the throat. If the eruption is of a paler dark colour. the prognosis is much less favorable, than when it is of a bright red. and diffused over the body If after the eruption commence, it should sud-denly disappear - it may be regarded as a very unfavorable symptom. If the inflam-mation and swelling in the fauces are so great as to cause difficult respiration. a fatal termination will in all probability follow. The character of the attending fever

has an important bearing upon this disease
If the fever is very violent, or if it should assume
a typhoid form, the greatest danger
may with certainty be apprehended.
If inflammation of any of the viscera should
take place, the danger is augmented
Scarlatina is less dangerous when it occurs
in children than in adults. when this
disease attacks women who are pregnant,
it will generally prove very unmanageable.
A favorable prognosis may be formed if the fever
abates and the skin regains its natural
temperature. the pulse becomes less frequent
and desquamation of the cuticle takes place.
In the early stages of this disease it is impossible
to form a prognosis with any degree of
certainty

Sequelae

The diseases with which we are acquainted
are more likely to be followed by a long train
of evils as that which follows, Scarlet fever

The most common consequence of Scarlatina is, dropsy; the period of desquamation is the time most favorable for dropsy to make its appearance. The cause of dropsy appears to be premature exposure to cold. Some Authors seem disposed to doubt the correctness of this cause. if exposure to cold is not the only cause which produces this disease: it certainly produces it more frequently than all others combined.

Diarrhea is another consequence which sometimes makes its appearance during the convalescence from Scarlatina. And when it does occur it should be regarded as very unfavorable circumstance. it generally proves very obstinate, lasting until it wears out the remaining strength of the Patient. Inflammation of mucous membranes not unfrequently take place. pleuritis and peritonitis may be added to its legacies Inflammation is less common after Scarlatina

than measles, though it does occasionally take place.

Treatment.

The measures to be adopted for the treatment of scarlatina must have reference to each individual case, as well as to the various circumstances with which it may be associated. it is absolutely necessary that the treatment should have reference to the prevailing character of the epidemic - an indication, which it is of the utmost importance to bear in mind in the management of this disease. In scarlatina simplex - the symptoms are generally similar - that it is only necessary to confine the patient to bed - to keep the apartment cool - to provide occasional aperients - and refrigerant drinks, the diet of the patient should be light and nutritious - so long as there are any febrile symptoms present - it is also advisable to sponge the surface with cold water - by which means

the heat is rapidly dissipated and the Patient rendered more comfortable in It is seldom necessary ~~a cicatr~~ to bleed in this disease - unless the pulse denotes the greatest excitement - Emetics are said to be attended with very good effects - after which the bowels should be freely opened by a brisk aperient - the various saline remedies in combination with antimony are productive of a great deal of good in this disease - Astringent gargles are highly efficacious in several forms of this disease - In the early stages, purgatives may be exhibited daily. a combination of Calomel and Rhubarb administered at bed time and a dose of oil in the morning is a proper remedy - Circumstances however should guide us in the too free exhibition of purgatives medicines always carefully avoiding the debilitating effects which are very likely ensue after their incautious exhibition

bleeding proper, at any period during scarlet fever. some regard it as a very hazardous expedient; others recommend depletion in almost all violent cases, especialy in the early stages; the cause of this disease is depressing in its tendency - and I think by bleeding we are almost certain to induce the very symptomes - which give to this disease its peculiar danger and the ones it should be our steady and care to prevent. If a Practitioner deems it prudent and necessary to bleed it should be done with the utmost caution and reserve - nor only when there is an obvious indication for so doing -

Dr Wood remarks that he has seldom found it necessary to bleed in any case. I think then, bleeding in this disease is more likely to be followed by bad and ill effects than good ones. If inflammation of any of the mucous membranes should

accompany this disease, then it will be necessary to resort to such measures as will counteract the inflammation. leeches and cupping should be applied over the seat of the inflammation; and it would be advisable to use small doses of calomel and Antimony, the antimony will lessen the force of the circulation, without diminishing the actual quantity of blood in the system - which is very important indeed - cold applied externally may do considerable towards lessening the inflammation. — when the fever is well developed - a course of internal refrigerants should be adopted - the patient should be allowed cold water to drink - and to hold small lumps of ice in his mouth - When the stomach is very irritable - an effervescing draught should be given - nervous symptoms should be counteracted by the administration of some one of the various preparations of Opium

If during the progress of this disease, and after the eruption has made its appearance. it should suddenly retrocede. means should be resorted to that may make its reappear – the hot bath is certainly one of the best means that can be used other active refrigerants may be made use of. during the treatment of this disease the Practitioner should always be on the watch for symptoms of debility and when they make their appearance to be prepared for them. in some instances these symptoms. accompany this disease from the commencement or come on during its progress. Quinia and Ammonia may be used with advantage in these cases and a stimulating diet should be allowed the Patient.

Preventive treatment

It was supposed by Hahnemann. that by the use of Belladonna this disease might be prevented but this statement. like all others that have issued

from his mischief making brain. has no stronger foundation than his own imagination. What makes this statement more absurd and ridiculous, is the (infinitesimal) dose in which it is given — it is capable of exerting any influence, large doses should be given

An

Inaugural Dissertation,

On

The nature and treatment of

Paralysis;

Submitted to the Examination,

of

The Provost, the Regents, and Medical Faculty,

of the University of Maryland,

For the Degree of Doctor in Medicine,

By

Wm. O. H. Larkin,

of

Maryland.

February. 1849

Paralysis

That morbid condition termed Paralysis, signifies the loss, or absence, either partial, or entire, of the power of motion, with or without, the sense of feeling being involved; it is a disease which shows itself as a sequel of a change in the Nervous System; a change by which nervous Energy, is either considerably deranged, or totally destroyed, and as Muscular tonicity, and contractility, are supposed to depend upon healthy exercise, of the of the legitimate functions, of the nerves they consequently suffer, when these become impaired by disease.

Paralysis has received different names, as it exhibits itself in different parts of the System, or in different organs. When the healthy and diseased functions, are separated by the Median Line, it has been called "Hemiplegia" Paraplegia, when the lower extremities and sometimes part of the trunk, are affected, and the paralysis is bounded above transversely. "Partial Paralysis", when only one limb or organ of sensation, is involved or one of the upper extremities, again, we may have palsy of one of the senses, of sight, hearing, smell,

touch and taste.

In a majority of cases, paralysis is not a disease "Per Se", but only a symptom, elicited by a morbid cause existing elsewhere, in some one of the nervous centres, either the Encephalon, Spinal Cord, or Ganglionic System, though in some cases, the conducting filaments become so altered as to disable them from transmitting sensations to the sensorium, Examples of this character, present Specimens of purely Local paralysis, these however are rare, compared with the greater number of causes which operate, to produce this disease. There are general conditions of the Brain, which may influence the nervous system morbidly, to such an extent, as to occasion paralysis, as congestion, Hemorrhage, serous effusion, Tramollissment, Induration deposition of Pus or Fibrin, Hydatids, Anomalous growths, the introduction of foreign substances of various kinds, Spiculae of bone, compression from without, as by portion of its bony covering, blows and other injuries of violent character. It is supposed however, that palsy may arise, from a functional change in the brain without-

any organic lesion, as in some cases of decided paralysis, post-mortem investigation has not discovered any structural change. The Brain being the organ, by which we appreciate objects surrounding us in the external world, and it being also the residence occupied by the human will, we can easily perceive, why a morbid principle existing within the Brain, could by interrupting the communication between it and those objects, prevent the accomplishment of those actions, which it is accustomed to perform, in its normal condition. Hemiplegia is the term used to express that form of the disease, which more commonly is induced by functional, or organic derangement of the Brain; by this term we mean, a paralyzed condition of one side separated by a line, drawn in a perpendicular direction; it can sometimes be attributed merely to a congested condition of the Brain, and consequently the disease disappears with the cause, in other instances it may be owing to effusion, even in a very small quantity, but oftener there is found upon examination, a softened condition of the substance of the Brain, this softening the result of inflammation, either

acute or chronic. Now it is rather remarkable, that the amount of disease does not always correspond with the extent of lesion, as cases have been observed in which a very small extent of the Brain, has participated in the change, and yet that quantity of morbid influence, has proved sufficient, to give rise to a serious disease. Again, sometimes Hemiplegia is the result of Cerebral hemorrhage, or Apoplexy when the vessels of the Brain have become so engorged, as to be ruptured, and the deposition takes place upon, or within the substance of the brain, and that deposition acting as a foreign body, breaks down and lacerates it; it is supposed by some, that the paralysis is the result of the softened state of its substance, superinducted by the effusion; that the blood is absorbed, sometimes leaving a cavity, and sometimes not; that a cicatrix is formed around the immediate seat of hemorrhage, and that immediately around this, the softening occurs, which proves the cause of the Paralysis. In some instances, the clot of blood becomes inclosed within a cyst, by a process of nature, in which,

when extravasated, it forces its way from the substance of the hemisphere, into the ventricle. Some deny that it can be absorbed or deposited in any quantity, and they cite cases of Paralysis, in which several ounces have been found in cavities, formed by it. This softening may follow inflammation, or Apoplexy, whereby the vessels have become eroded, by the consequent deposition of a foreign substance, and the substance of the brain deprived of its usual supply of nutrition. Palsy may also be produced by the pressure upon, or within the brain, of tumours of various kinds, encysted tumours, Abscesses, Carcinoma, Melanosis, Hydatids; instances have also been known, of Hemiplegia occurring from the pressure of the cranium, by an excessive growth of the bone, as also by a thickened condition of its membranes. An interesting fact connected with paralysis arising from the Brain, is that the affection exhibits itself, on the opposite side, from that on which the cause resides. This is almost universally true, exceptions however are said to have been discovered, but the fact is established by so many able, and accurate pathologists, that the apparent exceptions, are attributed to negligence in the search, and the substitution

of an apparent for a real cause. This apparent irregularity is readily corrected, when we observe the disposition of the fibres which pass out from the Medulla Oblongata, which decussate, and are distributed to different sides from which they originated. The same law holds good, with relation to Facial Paralysis, though the nerves which supply these parts, the "Fifth pair", and the "Portio Dura" of the Seventh pair) apparently have their origin, above the point where the cerebral fibres decussate; but we are indebted to the researches of two highly distinguished anatomists, for the discovery that they originate lower down, than formerly supposed, and are governed by the same law with others. The fibres of the Cerebellum though, are not arranged in the same way, and yet in paralysis which can only be traced to some disturbance in this portion of the Encephalon, we still observe the disease upon the reverse side; Some are disposed to explain this incongruity, upon the supposition of the immediate sympathy, existing between the Anterior pyramids, and the pons varolii, which is composed principally of fibres, from the cerebellum, and that the palsy, does not depend so much upon

the injury inflicted upon the cerebellum, as upon the the Cerebral fibres, incorporated with it, as the Cerebellum is supposed to be only the instrument, through which nervous agency is transmitted, and is not associated with the power of voluntary effort. Amusing instances are recorded in Medical books, of the loss of Memory, depending upon organic lesions of the Brain, sometimes resulting from External violence, and at others occurring from no appreciable agency, this is supposed by some to partake of the nature of Paralysis, affecting the mental faculties, they sometimes occur synchronously with Physical derangement, and at others exist separately.

Paraplegia presents another variety of paralysis, in which usually both motion and sensation are lost though by no means always the case; loss of sensation and motion, can only take place when all communication is interrupted between the Brain, and the limb or organ affected, by the complete division, or destruction of the Spinal Cord, for there can be no other agency than the Spinal Cord, employed below the seat of the disease, in the conveyance of sensation, and voluntary motion, but in palsy of those

movements which are purely and essentially reflex in their character, the origin is in the Spine itself, the same causes which tend to produce Hemiplegia, may also occasion Paraplegia, as fractures of the vertebrae, softening of the Spinal System, Induration, disease of its membranes, laceration, the introduction of foreign substances, as blood pus, serum, tumours, exostoses, diminution in the size of the canal &c. These causes sometimes produce disease of a permanent, and sometimes only of a temporary character. concussion of the spine, like concussion of the brain, may cause extravasation of blood, which acts for a time as a foreign body, and ultimately becomes absorbed, and the nervous system formerly morbidly impressed, resumes its original normal condition; The immediate and continued application of cold, accompanied with moisture, is spoken of as apt to prove an exciting cause of Paraplegia. It is supposed by some that in the greater number of cases, of this species of Palsy, the cause is purely cerebral, this is in some instances undoubtedly true, for patient investigation sometimes fails to discover any signs, by which the cause can be located in the

~~Brain~~ Spinal cord, and yet the disease has been clearly confined to a distinct portion of the body, divided transversely and at the same time appreciable disturbance of the Cerebrum, has manifested itself, as coma, incoherency of mind, giddiness, vertigo &c. Usually when paraplegia follows as the result of Acute Myelitis, the prognosis is exceedingly unfavourable, but more often it is a chronic disease, and lasts sometimes for a number of years. In some cases it is altogether functional, and depends upon an atonic condition of the Spinal centre, produced probably by indulgence in venereal excesses, the abuse of Alcoholic liquors, or the direct application of some powerful excitative agency, such as cold. An interesting circumstance is sometimes observed, in the limbs of Paraplegic patients, that is that by irritating them, we may sometimes produce spasmodic involuntary contractions, though the same muscles, cannot be brought under the dominion of the will; this fact at first strange is explained, by the hypothesis of the reflex action, of the Spinal system, and has been observed, when all communication has been cut off, between the limb and brain, by destruction of the cord above

the point of origin of the nerves, supplying the limb. As has been observed of Apoplexy, and Hemiplegia, very often in post-mortem examinations, after Paraplegia, no morbid appearances are visible. In its incipient stage, Paraplegia is often comparatively easy of treatment; that is before there is complete palsy, of the limbs, and before the Sphincters of the Bladder, and Rectum, have lost the power of contracting, upon the receipt of nervous influence.

Local Paralysis may be a deprivation, of both Sensation and Motion, or only one, without the other, in a limb or organ, or in one, or a number of muscles, concerned in effecting a certain function, and at the same time the palsy may be either partial or entire. This kind of palsy more commonly affects those organs, called the organs of Sense. The causes of these palsies are nearly always located in the course of the nerves themselves, that is in the nerves after they have left the brain, and are being distributed to their respective destinations; if this were not the case and the morbid influence been located higher up, the palsy would be of a more general character. As an Example of Paralysis,

affecting one of the senses, we have Amaurosis, or Gutta Serena, in which there is either a dimness, or a loss of sight, and this loss is not owing to any disease of the component parts of the structure of the organ, but arises from a morbific cause, either in the expansion of the optic nerve, (the Retina) or at its origin, (the Corpora Quadrigemina) we may have this affection from the same causes as mentioned for other forms of the disease, again it may be induced, by an injury to some other nerve than the one supplying this organ. An instance is related by Dr Ellidson, which came under his immediate notice, of a woman in whom the operation of Arteriotomy had been performed, and in whom, and in whom a branch of the Supra Orbital had been wounded; in a short time the sight of the eye, on the same side became seriously affected; these things cannot readily be explained, and give rise to the question, whether the connection is a functional one, or only sympathetic. In amaurosis we have a sluggish condition of the Iris, and we find the pupil dilated, occasionally however the pupil is very much contracted from irritability of the "third pair", induced from disease of these nerves, the iris is sometimes totally insensible to the impression of light.

other portions of the cerebral mass, gives rise to serious disease; it is often associated with deafness, which may be explained by the local intimacy of the Portio Dura, with the nerves of hearing. Disease of the Portio Dura sometimes arises from a carious condition of the bones, or from the enlargement of a gland in the neighbourhood of the ear, and its consequent pressure upon the nerve, and as the conduct of the face depends upon the condition of this nerve, there is a loss of muscular contractility, when it becomes affected; this is true of all the muscles of the face except the Masseter, and Temporal which do not derive their nervous energy from the Portio Dura, but from another source. Palsy of the eyelids may also occur, so that the patients will be unable to govern their movements, and open or close them at will, in which case the balls, not being supplied with the fluid secreted for the purpose of lubricating them, and being constantly exposed to the irritation of the surrounding atmosphere, is apt to be attacked by inflammation. So we may have palsy of the muscles concerned in the movements of the face, causing Strabismus. Again the muscles of deglutition, as well as those by which articulation is effected may be palsied.

Sometimes the Muscles of the Rectum and Bladder, are diseased in this way, so that the feces and urine are either detained, or incontinently evacuated, according as the Sphincters of these organs, are or are not involved. Besides paralysis of motion, the nerves of Sensation may lose their Susceptibility, that is those nerves which convey impressions, from surrounding objects in Nature, as well as those with which the organs of Special Sense are endowed; in paralysis of sensation of the facial nerves, the fifth pair is the set involved, and this may or may not be accompanied with deficient power of motion, in the jaws and cheeks, as from the supposed structure of the nerves, the motor and sensorial portions are distinct; the healthy parts will be separated by a perpendicular line; in some cases the disease only shows itself in a small spot on the cheek. when the organs of Special Sensation become impaired by this disease, the same rules hold good with relation to the causes, as in other parts, that is that it may reside in the nervous centre, the connecting cords, or the ramifications supplying the organ. A marrowis has already been noticed. There is sometimes, either a partial, or total

loss of the sense of smell, which is termed Anosmia, it may originate in the root of the olfactory nerve, in its progress, or in the Pituitary membrane, to which it is distributed; in some cases it is said to be congenital, in others has been observed as the result of chronic inflammation, the habitual use of snuff &c, whereby the nervous energy becomes exhausted. Loss of taste is another example of the same kind, both in this, and loss of smell the general sensation may remain unimpaired, though the individual is unable to distinguish, between the odour and flavour of substances, which appeal to those organs. The loss of hearing, though in a vast number of instances not depending upon a paralytic condition, is sometimes to be attributed to it; its legitimate cause may be in the cerebrum itself, along the course of the auditory nerve, in its passage to the temporal bone, or in the nerve in its distribution within the temporal bone; as in all other forms it may be structural or only functional

In paralysis of general sensation, there may be a total loss of that faculty, by which we discern the distance, shape, size and consistence of a body, with which we

come in contact, and yet there may exist an exquisite sensibility, to the receipt of painful impressions, whereas in other cases the sense of touch may be acute, in the same individuals, who exhibit no manifestation of suffering, under the application of violence. It is supposed that the nerves of touch, may be distinct from those of general sensibility, and palsy of the one, does not necessarily involve the other.

A variety of causes may operate, to produce this disease, and these causes may be either mechanical, chemical, or vital; any body occupying a place, destined for the circuit of the nervous substance, whether bone, any foreign matter, the morbid growth of a tumour, fluid effused within, or upon the nervous mass, these agents, whether they tend to obstruct, compress, or lacerate, and completely disorganize the substance composing the nervous cords, and thereby interrupting the continuity existing between them, and the limb or organ supplied by them, must necessarily deprive it of its due nervous energy; and these mechanical causes may exert their influence, whether they be lodged in the cerebrum, spinal cord, or nervous

extensions of the Spinal cord. Among many other causes of Paralysis, may be mentioned Apoplexy, which by the rupture of a vessel, in the Brain, and the consequent effusion of blood upon, or within this organ, mechanically interferes with the nervous roots, and thereby interrupts the nervous influence; this cause more commonly produces that form of paralysis, which we have mentioned as Hemiplegia; again Meningitis, giving rise to the unnatural deposition of Pus, Serum, &c, acts as another exciting cause, Structural diseases, as we have before remarked, Cerebral Congestion, Mechanical violence, all these by disturbing the beautiful harmony of the Nervous System, and interrupting the communication between the brain, and the limb or organ, which is indebted to it for its nervous origin, may occasion Paralysis. If a nerve be cut or torn into, whether by violence, or by a surgical operation, the parts below supplied by it, must necessarily be paralyzed; it may be proper however to remark, that violence may only effect a paralysis of a temporary character which disappears after the lapse of a short time, and the part impressed, recovers its vigour, under the reinvigorating effects of nature. Mechanical violence will

more likely produce the consequences, of which we speak, in children, than in adults, from the increased susceptibility of the nervous system, in early age; upon the same principle dentition in infants also often proves the predisposing cause in some cases.

Certain chemical substances, also, have been recognised in the list of causes for this disease, among these we observe the Carbonate of Lead, producing a peculiar form of Palsy; this affection is generally observed as a sequel of Colica Pictonum, it exhibits itself in the hand, and fore-arm, and the palsy manifests in the Extensor Muscles, consequently it is styled "Wrist-drop"; under the continued use of this article, sometimes without any other warning, the patient experiences a sense of debility in the limb, and this sensation continues until he becomes unable to use it; finally the hand becomes flexed upon the fore-arm, and the fingers upon the hand, the limb however can be placed in its natural position by force, the muscles lose their natural appearance, and become flaccid, this however is not the extent of mischief, which can be produced; if still allowed to exert its influence, other and more vital organs become implicated, until the victim falls a prey to its debilitating

effect upon the Brain. Arsenic has also been mentioned as possessing a paralytic tendency, when too long continued, or administered in an excessive quantity; conformed with these, some name the inhalation of deleterious vapours, the poison of Asphixiate.

Those causes which may affect the Brain, Spinal System, or Nervous branches morbidly, in a fatal manner, may have been elicited by Mechanical violence, but in most cases, they arise without any previous structural lesion, the most of these causes, have been enumerated in the preceding pages.

They are of different character, in different cases, and different species; may make their appearance so suddenly, as to leave no doubt as to the nature of the disease, or very insidiously develope themselves; the affected limb may experience a sense of formication, such a sensation as we feel, when we say that a limb is asleep, there may be a feeling of debility, or an alteration of temperature, these morbid phenomena, may only occupy a small spot, or may cover a large extent of surface, sometimes in the incipient stage of the disease, there is a spasmodic contraction,

of the muscles, these spasms may be either of a tonic, or a clonic character, that is there may be either convulsions, or the part may be affected with permanent rigidity. Pain is sometimes felt, and this pain is not of a fixed character, it is sometimes sharp and lancinating, and at other times dull and ill defined; the part affected appears to lose the power of regulating its own temperature, and is more easily influenced by the surrounding atmosphere, than when in a healthy condition, the appearance of the muscles undergoes a perceptible change, they become soft and flabby, the skin acquires an exceedingly white hue, the circulation in the limb becomes languid, the volume of the part is less, than when in health, on account of the deprivation of nervous stimulus, necessary to the performance of the organic functions of the part: Edema is also another appearance observed, resulting from the debilitated condition of the part affected. The general system sometimes escapes, but more commonly it also sinks, ascribable in some cases, to the want of power, to indulge in insufficient excretion, but in most instances, to the extent of lesion. The intellectual faculties are nearly always

disordered, but more frequently in cases arising from Cerebral lesion, than Spinal; the memory suffers more, it is said than any other faculty, especially the recollection of language; the passions also participate in the change, and individuals before dignified, proud, and irritable, become mild, and amiable, and those before insensible to the finer feelings of human nature, become affected very readily even to tears. The various appearances which present themselves, in different cases of Paralysis, sometimes form indications for the location of the cause of the disease; thus if the Paralysis is not well defined, and the spasms are of an alternating or clonic character, we are justifiable in the supposition that the origin resides in the Spine or brain, and is the result of an inflamed, or irritable condition of one of these organs. Again if the disease comes on slowly, and long rigidity is the consequence, there is reason to suppose the existence of Spinal, or Cerebral lesion; or when the attack appears suddenly, and as quickly departs, it may be presumed to be owing to a state of congestion, but when the disease appears to assume some permanency, after these sudden attacks, and the

precedent symptoms of congestion, have been well marked the affection may be reasonably ascribed to hemorrhage. In Hemiplegia, individuals have been attacked in bed, without any appreciable cause, they have risen in the morning, and discovered the loss, of the use of a limb; in other cases, the affection has been observed to commence in a toe, and gradually extend until the whole limb, and sometimes both, on the affected side become useless. The lower extremity however is generally less diseased, than the upper: the line of demarcation often exactly follows the median line. In this form of Paralysis the patient usually experiences a sense of drowsiness, and lethargy preceding the palsy. When the muscles of the face are diseased, in this way, those on the affected side not being regulated by nervous influence, as those on the healthy side; from their deranged condition, particularly those of the mouth and tongue, the saliva accumulates, and runs from the corner of the mouth, sometimes also the patient swallows and articulates with difficulty. In Paraplegia we observe the disease, in the lower extremities, and sometimes part of the trunk. When arising from disease in the spine, we generally have some evidence

of that fact, as pain, tenderness upon pressure, marks of violence, &c or it may be accompanied by Cerebral disorder, as headache, or derangement of the Special Senses.
Usually its arrival is gradual, preceded as before remarked by the usual precursors of this disease, as itching, numbness weakness, tottering of the gait &c; these feelings become aggravated until finally, the patient loses all power of voluntary motion; sometimes he does not experience the proper sensations, upon evacuating the Rectum, and Bladder, this increases, until the Sphincters lose their nervous energy, and incontinence of feces, and urine takes place; the urine also becomes altered in quality, acquires a putrescent odor, and looks ropy; in this form of the disease it is, that the convulsive twitching is observed, owing as we before remarked, to the reflex action of the Spinal System.
Paralysis may generally be diagnosed with facility, both from the peculiarity of the Symptoms, and from the history of the case under consideration, occasionally however the disease appears concealed, under the disguise of Stupor, but this comatose condition, is rarely so profound as to prevent us from discovering, upon examination and,

examination, of the real nature of the disease. Sometimes without a previous knowledge of the history of the case, there would arise some difficulty in establishment of a correct diagnosis, as when an affection resembling Paralysis, affects a limb, or runs along the course, and sampications of a nerve, by inflammation, of the character of gout, or rheumatism, from the peculiar nature of the affection however, the recognition is comparatively easy.

The ultimate issue of a case of Paralysis, depends very materially, upon both the nature, and extent of the cause. Cases arising from simple congestion, gives rise to no serious apprehension, under proper care and treatment; when the result of Hemorrhage, a cure is often effected, though the progress is tardy, and always liable to recurrence, Paralysis the result of inflammatory softening, and induration, is however formidable, and often having progressed, generally fatal, if not however in the incipient stage, sometimes yields to treatment; when the pressure of a tumour, or other foreign growth, produces this disease, the prognosis is very discouraging. When depending upon mode of life, temporary causes, poison, depression of cold, and the vigour of the constitution has not succumbed, the prognosis should be favorable

In the majority of cases, Local Palsies may be expected to remove, as in them, the cause is generally slight, and temporary, and may be easily removed.

The primary indication, in the treatment of Paralysis, would appear to be to ascertain the pathology, of each separate case, which presents itself to our observation, and address the remidiative employ, to the supposed seat of the disease. If dependent upon congestion, usually the result of a plethoric condition, we are recommended to bleed, generally and locally, purge actively, employ refrigerant remedies, enjoin low diet, mental and physical repose, and in some cases blisters, as well as sometimes, to bring the patient under the specific influence of Mercury. In cases of long standing, beneficial results have followed, the use of blisters, directed to the seat of the disease, this to be conjoined with moderate purging. In Hemiplegia, the blisters should be placed upon the back of the neck. In Paraplegia they should be directed as near as possible, to the seat of the disease. Pessication, an Pustulation by Antimony, Tissues, Setons, and Moxas, are recommended by some, instead of blisters, these to be governed, of course, by circumstances. The Paralysis arising from Tumours, or any other cause which can be removed, the

treatment is to remove them, as speedily as possible. In instances where the morbid cause has become extinct, and there no longer remains any thing, calculated to keep up the disease, but the nervous system, labours under a state of depression, caused by the morbid impression before operating, a very different plan must be pursued; the condition to which we now refer, is clearly one of debility, here we must employ tonic, and invigorating remedies, great care however must be observed, with regard to the time, and circumstances under which we employ them, for while highly useful, in one stage, they would be decidedly injurious at another. Among these means are Nux Vomica, and its Alkaline active principles Strychnia and Brucia; they are supposed to act specifically, upon the nervous system, as stimulants, and to affect more particularly the motor portion, they however, should never be resorted to, during the existence of inflammation, or excitement; and even after this has subsided, great care should be exercised, in their use, and they should be withdrawn, immediately upon the notice of danger. In Paraplegia, and when the urinary organs, are involved, the Oil of Turpentine, and Cantharides, are especially applicable, and more so, when retention and incontinence of urine, are dependent on Paralysis

Mustard is highly useful, in chronic cases accompanied with debility, and an edematous condition. Water impregnated with Sulphur, both internally, and as a bath, is said to be useful. Hot-Baths are spoken of, in an enfeebled condition, but are contra-indicated, in disease of the kani. If the patient is weak, Tonics, the Shower-bath, gentle Exercise, good air, and moderate excitement of the mind, are salutary. Among the most important Hygienic measures, measures, to be observed, are that the body should be guarded, against Extremes of temperature, hence flannell should be worn, the food should be principally farinaceous, light, and easily digested. Among the local applications, we use friction, with the hand or flesh-brush; this should be done immediately after the use of the Shower-bath, untill a gentle glow is produced. Also as Lotions, Oil of Turpentine, Ammonia in a liniment, Tinc Capsicum, Cantharides, Blisters as before remarked, but they should be used with caution, as they are apt to cause sloughing, from the diminished vitality. Electricity, a current from a Galvanic Battery, in obstinate cases. Acupuncture, combined with Electricity. During the whole time, the patient should be encouraged, to exercise the limb. When the tongue

and fauces, are affected, they should be stimulated, with Masticatories, and Gargles, as Ginger Root, Horse Radish, and Skin Capsicum. In Palsy of the Olfactory nerves, Ferrhenes asbestrum Album, Turbeth Mineral. Lead Palsy, uncomplicated with Colica Pictonum, should be treated, with the same remedies already enumerated, and in obstinate cases, the Sulphate of Alumina and Potassa may be added. Besides the Therapeutic Means employed, the temperature of the feet must be well preserved, as from the diminished power of vital resistance, it will more readily suffer, than the same part in a vigorous condition. Careful attention must be paid, to the state of the bowels, and bladder, as in consequence of their decreased sensibility, an accumulation of excrementitious matter, would prove highly deleterious, if not disastrous.

A history of four cases
submitted as an
Inaugural Dissertation
to the examination
Of the Provost, Regents & Faculty of Physic
of the University of Maryland
for the degree of
Doctor of Medicine,
by Edwin S. Thomas
of Maryland

(1st) Case of Ferdinand Righter

Ferdinand Righter aged 24 years, came into the Hospital of A. House, on the 26th April 1848, apparently dying, being very much exhausted. After being placed in bed, he recovered somewhat. Upon questioning him, he stated that he had been working in a Cotton Factory, that he had taken a long walk, about two weeks before and had perspired pretty freely. It became checked in some way, he had taken cold and had been laboring under present symptoms ever since, only in an increasing degree. At this time he was breathing with difficulty, - with effort at coughing, which was attended with pain, his sputa being not much different from that in catarrh. His pulse was very feeble and fast, complains very much of a stitch in his side and could scarcely bear percussion. The sound was very dull on right side. Auscultation proved very little as his voice was nearly gone. I perceived however, that there was a crepi-

-tant râle over nearly the whole right lung. Did not detect any abnormal condition in left. I concluded from all I could gather, that it was a case of Pneumonia with some Pleurisy. I determined at first to bleed him, but concluded that he was too debilitated, especially as he said that whenever bled heretofore, it made him sick. His pulse was very feeble and quick at this time and I thought I would wait a few hours. Applied cups to his side however, but obtained very little blood. On account of his very weak condition, gave him wine and also Sulp. Quinine ʒj, Carb. Ammoniae ʒj, Water ℥viij — Tablespoonful every 3 hours. — I saw him again in a few hours. He seemed to be more composed. His pulse was a little stronger. Bled him to the extent of 12 oz. Pulse rises under bleeding. Ordered above prescription to be continued and gave him also Tart. Antimony in third of a grain doses every two hours. In the evening he seemed something better. His pulse is fuller & not so frequent.

Bled him from other arm. Blood flows slowly. Took about 6 or 8 oz. Patient seems somewhat relieved. He breathes more freely and the pain in his side is not so severe. Sputa acquiring rusty hue. April 27th. The patient this morning was something better. His pulse is stronger and not so rapid. Slept some during the night before - the first sleep for two nights. The acute pain which he had, upon percussing him on right side is almost entirely gone. The stitch in his side during respiration, likewise. Dyspnoea not near so bad as upon the day previous. The sputa has changed from a white mucus to a rusty yellow phlegm, but not very viscid. Continuing same treatment. April 28th the attending physician saw him and prescribed for him Tart Antimon grs IV, Tinc Opii LX gtts, Aqua ℥vj. Tablespoonful 3 hours. Ordered blister to affected side and gave Spts Mindereri. - I saw him again in the afternoon. Appears to be much better. Upon examining his lungs, I found that the

side affected was not so dull upon percussing it. In listening on that side, there was large crepitant râle over the whole surface of lung, more distinct in middle, before. The left lung had, apparently a healthy murmur. His pulse was better and his condition generally. He had recovered the use of his voice, also in a measure. Complaining of constipation, gave him an injection of starch mucilage. 29th. Much improved. Is rapidly getting well, although still weak. May 1st. There appears to be a healthy condition of respiratory organs, with the exception of a slight sibilant sound in one portion of right lung. 2d. Gave him liberty to get out of bed and walk in the yard, it being a pleasant day 5th. He was discharged to-day out of the Hospital cured and as lively as if he had not just experienced a feeling of being rather uncomfortably near his grave.

Case of John Arnold.

This man came under my observation in the hospital attached to the Alms-House of Salt City & Co. He entered on the 1st of September. He had been in the House for two days before but I did not observe him, because of his having been sent to another room. When I did see him, what little I could learn of his history was as follows: he is a German by birth and came to this country about two years previous to date. His trade is that of a Gardener and he has been working in that capacity on Federal Hill. From what I gathered two or three days after his entrance, he had been exposed to a very heavy fall of rain, some time before and he had become wet to the skin in consequence. Besides, that he had not taken his clothes off until night. I supposed his age to be about thirty five years.

In consequence of said exposure, he had a chill on the same night and for several successive days, still continuing his daily avocation.
When I saw him on the evening of the 1st Sept. he was very stupid, not readily answering questions put to him, which had to be given through the medium of an interpreter. He was not easily roused - his eyes looking intelligent enough however, yet he being, apparently, averse to answering my questions. His pulse was very full & bounding his tongue slightly furred & dry, surface of body generally hot. Had had a chill in the morning and was then feverish, complaining of considerable pain in epigastric region, together with some headache. His bowels were regular
Supposing from the present symptoms and previous history that he had intermittent, I gave him a prescription of Sulp Quinine gr IV Sulp Ferri ½ gr, Aqua ℥ss and ordered it to be repeated 3 times daily, until I should see him.
Sept 2d Visited him again in the morning.

He was in, about the same condition as on previous day. Pulse, not so full, but more frequent. The fever appears to continue and he cannot easily be aroused to answer questions. He complains still of headache and also pains in his limbs which I ascribed to fatigue. He appears weak. Bowels have not been open for twenty four hours. Appetite he has none. – I slightly increased the dose of Quinine & ordered him 1 oz – Sal Rochelle.
In the evening, the symptoms had slightly abated.
Sept 3d Saw him again this morning in company with the attending physician. Still in about the same condition. We made a more thorough examination, the man being somewhat more attentive to the questions asked him. His general condition denoted great prostration and want of energy, with the particular symptoms indicating debility of nervous system. He complains of headache, of deafness (so much so that it requires some effort to make him hear) pain in back, loins and legs, pain in epigastric,

and right & left iliac regions, (more particularly in right) & tenderness of muscular fibre. The tongue was furred and red at tips, pulse frequent and feeble, - bowels had been moved two or three times by the salts which had been given the day before. Upon examining his lungs, (which was done with difficulty owing to the dyspnoea being so great) there appeared to be a perfectly healthy murmur, throughout their whole extent. He had had also, during the night before, according to the account of the nurse, some epistaxis. The attending physician supposed from the symptoms, as far as they could be discovered, that the case was one of Typhoid Fever. The characteristic eruption in this fever called the rose spot from its color did not display itself either on the abdomen or chest. Inside the knees, there were spots which bore the character of this peculiar eruption, two or three very well marked, disappearing upon pressure, whilst upon the back there were perhaps a dozen, although very indistinct.

The Sal Rochelle was ordered to be repeated, the bowels being somewhat sluggish in their action & for the purpose too, of clearing them of the irritating matter which might be collected in the larger intestines, — The prescription given a day or two back (Quinine & Iron) was ordered to be continued, whilst a nutritious and easily digestible diet was given viz: Coffee for breakfast, beef tea for dinner, tea for supper and toast-water for drink. — 5th. Do not perceive much, if any change in his appearance. His pulse seems to increase in frequency and to become more feeble. His tongue looks dryer and brown, — other symptoms continuing. His bowels seeming still to be indolent, gave him another dose of Tart Sodae & Potasp. He is excessively thirsty and passes a great quantity of urine. I placed the cup of water to his mouth and he drank nearly the whole contents — a pint, greedily seeking it.

His stupor is great, so much so, that it is difficult to make him notice what we are doing.

Sept 6th. Visited him again in company with physician. He is still very stupid. Could get no answers to questions and it was with the utmost difficulty we could get him to swallow anything. For the purpose of arousing him, we applied blisters (very small) on the inside of his legs. Coffee was given him twice daily, and instead of the medicine which I had given, some days since, he was ordered Sulph Quinine ℈ij, Ol. Terebinth ℥ss, Gum Acaciae ℥ss, Aqua ℥vj — a tablespoonful to be given every four hours. —— In the afternoon, I went into the hospital to see him and was astonished to find the patient sitting up, endeavoring to tear off the blisters which had been applied in the morning. At night he seemed to be somewhat improved. His pulse was not quite so frequent, though feeble. Sept 7th. More lively to-day than usual and answers questions more to the point. I questioned him pretty closely and found that his head still continued to swim and ache. He had ringing in his ears with deafness.

He complained of pain in his back, loins and legs. His tongue was furred dry and brown, but clean at edges, - trembling very much when obtruded from mouth. His pulse is somewhat fuller and stronger than it has been and beats 95 strokes per minute. The tenderness in left iliac region has disappeared, whilst that in epigastric and right iliac has increased particularly in latter region. He has excessive irritability of muscular fibre, more so than I have ever seen before, and tenderness of surface generally, crying out when pressure is made anywhere and attempting to weep, though unable. His cheeks are glowing, with a circumscribed red spot upon each. He has considerable heat of skin and fever generally. Attending physician saw him in the afternoon and thought he was better. Gave him a cooling medicine of Chlo Potass ℥j, Bi Carb Sodae ℥ij Aqua ℥vj - tablespoonful every four hours.

In the evening of same day, he was doing well.
Sept 8th " More stupid than yesterday.
" 9th " Continuing same treatment, patient appearing a little better.
Sept 11th " Visited him with physician. His pulse is remarkably slow, for so robust a man, as he must be in health, and for the character of the disease. His condition generally is somewhat improved, though his bowels are still sluggish. Prescribed for him occasional doses of Sal Rochelle.
13th " Appears to be getting better.
From this time out, the patient gradually improved. His loathing of food was great for a period of several days, after the last date, whilst his thirst continued and also the excess of urine. Like all patients with this disease and continued fevers of all kinds, he was much debilitated for some weeks. He attempted to run the length of the room at one time when somewhat recruited, but did not succeed.

Upon feeling his pulse upon this occasion the action of it was but very slightly increased. A week after this time, he left the Alms-House apparently restored to health.

— There are two or three points with regard to this case which I wish to notice before I conclude. 1st. with regard to the diagnosis. There was considerable doubt expressed as to whether the case was one of genuine Typhoid. Dr Power saw the case once or twice and, if I recollect rightly supposed it might not be Typhoid fever. There were several singular characteristics connected with the case which differed somewhat from the symptoms, which are generally found in this fever. One was the absence of all signs of diarrhoea. During the whole time the man was in the sick room, this symptom was entirely absent. There seemed to be not the slightest tendency to looseness of the bowels. Repeated doses of saline cathartics would scarcely move him and when an

operation was had, though copious yet there was no thin discharge, the passages presenting an appearance similar to a natural stool, — In this case too, the pulse after the first five or six days and before there were any well marked symptoms of improvement was very slow and full. The change appeared to be more sudden than gradual.

For several weeks the pulse ranged from 45 to 68 strokes to the minute, never more; and at the time that he walked up the room during convalescence it increased only four beats per minute. At the time of his leaving the house, the number of strokes was about what it is ordinarily.

— With regard to the rose spots there was some speculation as to whether they were bona fide in their character. Those which we thought might be rose-spots showed themselves only within the leg near knee with some few indistinct marks upon back which might have been flea bite or not.

His abdomen was examined carefully as well as his chest, in a strong light for the purpose of finding the spots, if they were there, but none were to be seen in these regions. Even the spots upon legs exhibited themselves for but a very short period, some two or three days.
— Such is the case as I present it, for one of Typhoid fever. In making the diagnosis, the symptoms in their sum were taken into consideration and as far as we could judge by them, from day to day we thought the case must be classed here. The symptoms, which showed themselves indicated the above diagnosis, — though there were several signs, absent which if they had presented themselves would have served to make the diagnosis more certain and more satisfactory to those who were attending the case.

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Julius Budd (colored) aged 24. Entered hospital on the evening of Sept 28th '48. Being absent from the house, I did not see him until next day. Questioned him with regard to his history, which resulted as follows: he had been sleeping out in exposed places, lumber yards &c during the whole preceding summer and up to the time of his entrance into hospital. He had caught cold some two weeks before, having got wet, during the fall of a very heavy rain. At that time he had a chill, which was followed by febrile symptoms, which had been increasing up to present time. When I saw him his voice was very husky, he was breathing with great difficulty, respiration much quickened, the state of the surface generally excited, tongue furred, the edges being clean and red. Pulse full, bounding quick (about 130 beats to the minute), general condition evidencing that he was debilitated to a considerable degree.

He sat up with much difficulty, attended with an increase of his febrile symptoms. In percussing his chest, I found that there was dulness pretty generally over right lung, left sounding somewhat clearer than natural. There was also increased thrill upon right side. In auscultating, I heard a crepitant rale, plainly to be distinguished toward apex of right - puerile respiration on opposite side. Bronchial respiration & bronchophony also on right. On left side near base of lung, there was also a slight crepitant rale. The sputa was somewhat rusty in appearance. I believed the case was one of Pneumonia.
I bled him to the extent of 10 oz, gave him barley water for drink and diet, and Z. Antimony in 1/4 gr doses every 2 hours. Under bleeding, his pulse improved. Visited him in the afternoon again. The Antimony had sickened him & I changed it to Ipecac. Being weak, gave him Quinine ʒij, C. Ammon ʒij, Ipecac grs XXIV, pulv XII. One 2 hours. In the evening, he appeared relieved. Pulse not so full or frequent - compressible, the surface not so hot

The medicine having disagreed with him, gave it at longer intervals. Oct 1st Patient seems better & says he is so. He rested tolerably well last night. He is however excessively weak and can scarcely sit up. The dulness upon percussion had somewhat disappeared. The bronchial voice, thrill &c were not so evident as they had been. The pulse was quick (110) and soft. I continued the medicine which I had ordered, resuming it every 2 hours. In the evening about the same. Oct 2d The man appears to be improving. The crepitant rale seems to be receding, toward base of lung. Pulse 104 & compressible. Oct 3d Condition about same, only that the pyrexia seemed slightly increased. Pulse fuller and not so soft. He complained of pain in region of liver this morning for first time. Upon pressing him there, it pains him. Suspecting hepatitis, I cupped him, at the same time continuing former treatment, of Ipecac Tinctura & Ammonia. The next two days the appearance &c of patient appeared to be the same

as usual, if any change, that of improvement. On the evening of the 6th he complained of being very weak. Could not sit up at all. Also complained of being chilled at intervals. The frequency & feebleness of pulse had increased; I gave him brandy and discontinued medicine until next morning. Oct 7th Early this morning I visited him again. He was no better. His secretions are very scanty. Mouth parched tongue dry & cannot protrude it. Complains that he sleeps very little. I gave him Bi Carb Sod & Potas and an anodyne. Attending physician saw him same morning and ordered Specac &c to be continued with brandy, which I had been giving him. Oct 8th No improvement in patient. He still complains of some tenderness about liver. I cupped him again, but obtained scarcely any blood. When attending physician saw him again in afternoon, the tenderness was not so perceptible. His pulse was very quick "thready" and feeble, secretions still scanty, bowels open slightly. Had not slept any night before, was continually shaking and teeth chattering. Dr B— suspected there was abscess of liver, believing he detected fluctuation. Ordered a sleeping draught. Next day, still weaker His bowels are loose. Still complains of chilly sensation

and shakes from head to foot. Mouth is parched, lips cracked tongue dry & rough, — pulse feeble. In the afternoon, attending physician again saw him & again examined him.
He was more confirmed in his opinion that there was abscess, symptoms indicating it, though fluctuation was so indistinct that some could not perceive it. The powders of Specac were stopped and Quinine & Ammonia (C) given, Coffee for breakfast & supper & Inf. Krameriae - wine glass 3 times daily, it being improbable from his condition that he would live. He died same night. — The post mortem proved the accuracy of diagnosis, made a day or two before. The liver was found full of little abscesses, some twenty or thirty in number. The lower lobes of right lung were apparently hepatized, also slightly at base of left, whilst, in lower lobe of right were found several abscesses, of the same character as those in liver. Intestines were slightly arborescent — no other change. The other organs apparently healthy. We cut into joints, spine &c for the purpose of finding suppuration, but could find no other deposits, beside those which have been mentioned ——

Case of John Philipps.

This man came into the colored Hospital on Aug 26th 1848. He is a native of the Sandwich Islands. He was "brought up" with the missionaries at those islands until he was twelve years of age, since which time he has been engaged in sea-faring life until the present. He is now 23 years of age. Has quite an intelligent look and the appearance of an American excepting his copper color. He looks quite enfeebled however from the ravages of his disease. He started from New Orleans, following his pursuit, for Liverpool on the 22d of April preceding his entrance here. Two weeks after leaving port, he was taken sick. He had profuse discharges from his bowels he said, from this time until he reached Liverpool where he arrived in 40 days from the date of his departure from N. Orleans, his sickness continuing all this time, passages pretty frequent, tinged with blood. He was taken to one of the Hospitals after his arrival and was treated for Dysentery. He remained there two weeks, when he was discharged, not cured, but much better. He then sailed for Baltimore, his

disease, not troubling him as much as before, until he was wrecked, when he got very wet. He states that then his bowels became very much disordered, passing stools frequently during the day, tinged with blood, mixed with slime & with some straining. He reached here in six weeks and after remaining in town a week without treatment and the disease getting worse, he was sent to the A. H. where he came under my notice on the 26th August. When he entered, he was suffering from frequent, small & bloody discharges from his bowels. The passage of the matter was attended with much pain, sometimes and again the pain was entirely absent. His stools were without smell. There was tenderness over right and left iliac, more decided in the latter and also over epigastric region. He complained of headache & dizziness. His tongue was of a very red hue, with a yellow coating in the middle and scarlet tinge at the edges. His pulse was nearly natural, somewhat more frequent than it should have been. I gave him a simple prescription of one ounce of Sal Rochelle, intending to examine him more closely at next visit.

Aug 27th Visited patient this morning. His pulse was small compressible & dichrotic - 88 beats per minute. Surface soft and of natural temperature, tongue moist, presenting the same appearance as on yesterday. He still complains of headache, says too, that his head swims, has decided tenderness in left iliac region, not so much in right. Gurgling in left iliac and tenderness in epigastric region. The stools are frequent and small of a color like tar, with streaks of blood, appearing in them and also shreds of blk viscid matter presenting themselves, altogether showing a very singular and decided appearance, being without any feculent smell. The matter clings to the side of the chamber and is of a yellowish hue, tinged with bile. There is great prostration. Lungs apparently normal in their character, though there is some little cough, attended with slight expectoration. — He complains very much of the weakness produced by his frequent stools. His face looks attenuated and his eyes have a dark blue or purple hue around them. — Having read a day or two before of the therapeutical value of Nux Vomica in this disease, I determined to try it, (in the absence of attending physician)

in connection with a saline medicine as an aperient. I accordingly gave him a prescription of Nux Vomicae gos XVIij, P. Ipecac vi gr, P. Opii gr iij, made into pulv vj. One to be given every morning noon and night. Also Tart Sodae & Potas ℥iss, Tart Antimonii grj, Aqua ℥viij. One tablespoonful every three hours. Aug 29th. His general condition appears to be about the same although his stools have not been so frequent as heretofore and as a consequence he rests much better and feels relieved. At 8 o'clk on the same evening I saw him again. His pulse is soft and compressible, 84 to the minute. Has had 14 stools during the day, pretty much of the same character as they have been. Tongue cleaner & not so red. Next morning, symptoms about as usual, has had sixteen stools during the night, making 30 in twenty four hours. Appearance of stools somewhat improved. He tells me that sometimes in going to stool, he strains ineffectually and has no passage. Thinking the medicine which I was prescribing was the cause of this, I ordered the Nux Vomicae not to be given so frequently; the other prescription to be continued. Gave him for diet, Arrow Root for breakfast, - beef tea for dinner & toast and tea for supper.

Aug 30th The patient seems better this morning. He slept very well last night. Stools are not so frequent, had 18 in last twenty four hours - twelve less than day prior to this. The passages are decidedly changed in their character for the better. They are of a dirty color, something like that of clay and also have a feculent smell. Pulse soft & tolerably quick (92). Tongue looks healthier. Continuing same medicine. Aug 31st Patient feels better, had no stools yesterday and thirteen last night, being five less than the last 24 hours. Stools more natural and of greater consistence. Pain over epigastric, gone. Slight pain in right and left iliac regions. September 1st The man appears to be improving daily. His passages are still of a clay color mixed with feculent matter, though still tinged with blood. His headache, giddiness & ringing in his ears has left him. The pain in right iliac region has disappeared and apparently he will soon be well. Sept 3d Two days after I last saw him, I visited him again and found him something worse, owing to the medicine having given out and the nurse neglected to renew it.

Sept 4th He has had five stools during the past day presenting about the same aspect as those which he had when he first came in, though not so bad. Continuing same prescription of Nux Vomica & Sal Rochelle. He remained under treatment for several weeks after the above date, occasionally having more or less stools, but always getting better, retaining however a tinge of mucous. The disease gradually left him. He continued however somewhat constipated for a time afterwards, but by giving him occasional doses of Rochelle Salts, his constipation gradually disappeared and in three weeks from last date, appeared to be entirely relieved of his disease. —— I would merely state in concluding this case as well as all my cases, that the same agent prescribed for several cases of this kind has acted beneficially at the Alms House, though none were so chronic in their character as the one of which I have given an outline above.

Dennis